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RURAL DEVELOPMENT, AGRICULTURE, AND RELATED AGENCIES APPROPRIATIONS FOR 1991

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE, AND RELATED AGENCIES

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RURAL DEVELOPMENT, AGRICULTURE, AND RELATED AGENCIES APPROPRIATIONS FOR 1991

MONDAY, FEBRUARY 26, 1990.

U.S. DEPARTMENT OF AGRICULTURE

ECONOMIC RESEARCH SERVICE

WITNESSES

BRUCE GARDNER, ASSISTANT SECRETARY FOR ECONOMICS

JOHN E. LEE, JR., ADMINISTRATOR, ECONOMIC RESEARCH SERVICE

B.H. (BOB) ROBINSON, ASSOCIATE ADMINISTRATOR, ECONOMIC RESEARCH SERVICE

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

INTRODUCTION

Mr. WHITTEN. The committee will come to order.

We have with us again Mr. Bruce Gardner, Assistant Secretary for Economics, and his associates. Where there are new witnesses testifying today, you might put their biographical sketch in the record.

We will be glad to hear from you, Mr. Gardner.

Mr. GARDNER. Thank you, Mr. Chairman, Mrs. Smith; I appreciate the opportunity to be here today with the heads of our economic agencies. They are going to present their statements on the fiscal year 1991 budget. Dr. John Lee is Administrator of the Economic Research Service.

The mission of ERS is to provide economic information about U.S. agriculture and the rural economy and to carry out the economic analysis of events and policies that affect farms and rural people.

Concerns about environmental quality and food safety are placing new demands on ERS. To meet these demands, two major research initiatives for ERS in fiscal year 1991 are food safety, including agricultural chemical use, and water quality.

Charles Caudill, Administrator of the National Agricultural Statistics Service, will present the budget statement for the Department's fact-gathering agency. NASS publishes reports detailing current production and prospects for crops, livestock, dairy and poultry.

The main NASS initiatives for fiscal year 1991 include providing additional information on agricultural chemical use as they relate to food safety and new data for agricultural labor and wage rates.

Also, plans are to improve the overall sampling frame for agriculture which will lead to more reliable and accurate surveys.

Lastly, I have with me Jim Donald, who chairs the World Agricultural Outlook Board, WAOB. WAOB's chief responsibility is to coordinate the Department's global crop and livestock supply/demand estimates. In recent years, WAOB has been increasingly called upon to provide information on climatic developments as they relate to U.S. and world agriculture.

WAOB was at the forefront during the 1988 and 1989 droughts in assessing weather conditions and the likely impacts on U.S. agriculture. To help meet growing demands for weather-related data, WAOB plans for fiscal year 1991 call for improvements in weather information systems and an expansion of its meteorological base.

That concludes my statement, and we would now like to proceed with our agency budget statements, unless you have questions at this point.

Mr. WHITTEN. I will ask questions when Dr. Lee gets through with his remarks.

OPENING REMARKS

Dr. LEE. Thank you, Mr. Chairman.

It is a pleasure to appear before you again. Tim Sanders asked me before the hearing how many years I have been coming to make this presentation. I said I was embarrassed to say how few years compared to the chairman, who has been hearing me and my predecessors——

Mr. WHITTEN. You mean you haven't been able to straighten the agricultural economy out yet?

Dr. LEE. That is a fair assessment. I would like to submit my prepared statement for the record and make a few remarks.

Mr. WHITTEN. Glad to have you do that.

BUDGET REQUEST

Dr. LEE. Our fiscal year 1991 budget request is for $56 million. That is a $5 million or 10-percent increase over what you appropriated for ERS in 1990. This increase is comprised of two program initiatives and some funds for some pay cost increases.

The pay costs are $1.848 million, including $1.3 million for the January 1989 4.1-percent pay increase, and $548,000 for one-half of the proposed 1991 raise of 3.5 percent. That means that we have absorbed the 1990 pay increase and half of the 1991 increase.

ERS's fiscal year 1991 budget request includes an increase of $1.6 million for an expanded program of work on food safety. This request is a key component of the Departmentwide $25 million initiative on food safety. Food safety has now become a major public issue. Consumers are concerned about the safety and content of food, and farmers want to be sure that consumers have confidence in the products they produce.

Thus, the subject is a legitimate one for policymakers. The Department feels that it is essential to have the data and analysis necessary to ensure a balanced approach to the food safety issue; one that reassures consumers, but without driving many farmers out of business.

The additional funds that we seek would be used to evaluate the costs and benefits of alternative public and private strategies to deal with the food safety issue, assess the impacts of pesticide and chemical regulation and residue control programs on food safety and on the well-being of farmers and those who service them, provide analytic support for USDA food safety and pesticide assessment activities, and, as a by-product, assist in developing a comprehensive multiple-use data base on agricultural chemicals to be used for food safety, water quality, and pesticide assessment activities.

We propose to examine how all of these proposed restrictions and regulations will affect yields, production, input use, consumer supplies and prices, farm income, government program costs, production costs, international competitiveness, worker safety, and the overall quality of the environment.

The ERS fiscal year 1991 budget request also includes an increase of $2.1 million to augment the President's fiscal year 1990 water quality initiative. Some of the money will be used to enhance the statistical reliability of agricultural chemical use data, to include building and maintaining an expanded agricultural chemical data base in cooperation with the National Agricultural Statistics Service, and to provide the analytical components for the Department's water quality initiative along with five other USDA agencies.

While contributing mainly to the goals of the President's water quality initiative, these activities will complement food safety analytical capabilities in pesticide regulatory assessments.

Concern is growing among farmers in rural communities, input suppliers, consumers, and State governments about the presence of agricultural chemicals in water systems, particularly ground water.

The President's fiscal year 1990 water quality initiative outlines a long-term challenging multi-agency program to develop information and analytical bases for addressing and resolving those concerns.

ERS will play an active role in each of the major components of the USDA water quality program, and is a lead agency for the program's data base development and the evaluation component.

Both the water quality initiative and the food safety initiative have an agricultural chemical or pesticide component. The water quality issue focuses primarily on the use of pesticides on broadacre crops, such as grains, cotton, and oil seeds, where the concern is mainly with chemicals getting into the ground-water supply.

The food safety issue relates more to the use of pesticides on fruits and vegetables that are ingested and that may contain pesticide residues. There is a subtle difference, even though both have a pesticide or a chemical connection.

What we plan to do, with the support of the Committee, is to take advantage of the pesticide connection between the food safety and the water quality issues in both the ERS and the National Agricultural Statistics Service's budgets to pool resources to put together a multiple use pesticide and chemical data base to include comprehensive data, not only on chemical use but also on related information such as the crops that are grown on particular farms, and the location of the pesticides used, soil qualities, and geographic information, so that we have a common use data base that would very efficiently allow us to address food safety issues, water quality issues, and give us for the first time the comprehensive data base that we need to look at all of the requests for new registrations and assessments that are coming down from EPA and from the other regulatory agencies.

In addition, a lot of States are proposing restrictions or regulations on the use of chemicals, and this data base will greatly improve our ability to deal with the impacts of those proposals being made.

Mr. Chairman, we appreciate the support that the Congress and especially this Committee has provided for ERS over the years. Our objective is to serve you and the taxpayers well and to continue to be a good steward of the resources you provide.

[CLERK'S NOTE.—Mr. Gardner's statement appears on pages 25 through 26. Mr. Lee's statement appears on pages 27 through 35. The explanatory notes appear on pages 36 through 59.]

GOVERNMENT POLICIES

Mr. WHITTEN. I don't know how we can go about accurately estimating our economic situation right now with all the problems we have to address. We must try to assess what will happen, including any changes in the laws or favored nations status as well as promises made by our leaders. I notice that your personnel has decreased from a historically high of 1200 to a current level of about 800, and yet we talk about doing a great job.

I wrote a book some years ago, where I put together speeches I had made about protecting the environment. I said back then that, in the process of safeguarding our food supply, we don't want to starve ourselves to death, yet on the other hand, we don't want to use any chemicals until we prove they are absolutely safe. I still agree with this statement.

Water is one of the major resources we have. As a Nation, we need it worse than we do oil. We have to pay close attention to what effect all of this is having on our water table on a national basis.

On the other hand, there is no way for you to control our government. We had the Secretary before us and I raised the point that since I came here, you had to clear everything with the State Department—the State Department enters into an agreement, and then we are committed to it.

Everyday in the paper, we read where the Administration has promised money to some country, yet in the last 10 years our debt has increased to over $3 trillion. I don't see any clear way to get out of this debt except to start producing what we need. We can continue to pay the debt that we owe and live with it, which means $180 billion comes off the top of our economy, or we can use existing law which says that when the Tariff Commission finds that imports threaten a domestic industry and recommends to the President, he can limit, tax or prohibit such imports.

We can't seem to get the Administration to use this law. I commend you for pointing it out like it is. At this time when Congress is increasing minimum wage, which increases the farmer's cost, the

Department is proposing legislation that would cut the budget $1.1 billion. Our agricultural economy is in a situation that is really serious.

Unless we change our habits, we will end up like Germany years ago. They had to develop a whole new system of finance. Next door we have what use to be called the Public Works Subcommittee, but is now called the Energy and Water Subcommittee. It is this Subcommittee that takes care of our public works projects.

The President's budget did not propose to start any new projects in fiscal year 1991. In other words, we can fund existing projects, but we can't start any new projects to look after our own country. In my opinion this is a short-sided policy.

Our nation's real wealth is not our financial system. Our real wealth lies in our resources. The land and waters must be preserved and rivers, harbors, schools, highways, airports, etc. must be constructed and maintained to serve the needs of the national economy. It's our economic health that must be restored and maintained to lead the way to strengthening the total national economy.

TRADE LIBERALIZATION

You stated, in last year's hearing record, that approximately 10 percent of your total staff are involved in trade liberalization research and analysis. What specifically are you doing to prepare the Department and the agricultural community for the more integrated European Community of 1992?

Dr. LEE. ERS has a major research effort underway on the European Community's Project 1992. We have three staff fully committed to the 1992 project in fiscal year 1990, and we have cooperative agreements with five universities to conduct additional analyses. We also have staff that serve on various interagency committees dealing with the 1992 project.

Since October 1988, ERS staff and cooperators have produced 28 products, publications and presentations on EC 1992, a list of which I will provide for the record. One of the more important products was an organized symposium which I moderated in Baton Rouge, Louisiana, last summer for the American Agricultural Economics Association. ERS is planning another symposium here in Washington next fall to bring together the results of this year's work on EC 1992. There will also be a series of articles and reports coming out throughout the year on this topic. A major report on EC 1992 based on work in ERS and from our cooperative agreements is expected by December 1990.

EC 1992 is a topic that will likely be around well beyond December 31, 1992, the date the EC plans to complete their internal reform program. We plan to continue following these developments in the future as they relate to U.S. food and agriculture.

[The information follows:]

EC 1992 Publications and Presentations

Gardiner, W.H. (1990) "**The EC's Agrimonetary System**: Evolution and Outlook After 1992," paper presented at the Farm Foundation's Bennett Agricultural Roundtable on EC 1992, Phoenix, AZ (Jan. 4).

Gardiner, W.H. (1990) "**Agriculture in the European Community**," paper presented at the **13th International Agribusiness Conference**, Glendale, Arizona (Jan. 8).

Gardiner, W.H. (1989) "**Recent European Community Developments and Implications for Feed Ingredient Markets**," paper presented at the Carolina Swine Nutrition Conference, Raleigh, NC (Nov. 9).

Gardiner, W.H. (1989) "EC 1992: What's in Store for the United States," Europe 1992, **CAP Reform and World Agricultural Trade**, Organized Symposia, AAEA 1989 Annual Meeting, Baton Rouge, Louisiana (July 31), 10 pp.

Gardiner, W.H. (1989) "Impact of EC 1992 on U.S. and World Agricultural Trade," **FAS Attache Conference**, Washington, DC (June 28) 7 pp.

Gardiner, W.H. (1989) "The Common Agricultural Policy of the EC: Recent Changes," **Inaugural Conference of the European Community Studies Association**," George Mason Univ., Fairfax, VA (May) 13 pp.

Gardiner, W.H. (1989) "The EC's 1992 Program: Effects on U.S. Agriculture," interview with **Money Radio** (June) 10 min.

Gardiner, W.H. (1989) "The EC's Common Agricultural Policy: Recent Developments and New Directions," TV interview with **USDA News Service** (July) 15 min.

Gardiner, W.H. (1989) "EC 1992: Implications for the United States," ERS Panel Discussion, EC 1992, **GATT and CAP Reform: Implications for Agricultural** Trade, ERS, Washington, DC (Aug. 7), 12 pp.

Gardiner, W.H. (1989) "Impact of EC 1992 on U.S. and World Agricultural Trade," ERS Seminar, (June 26) 7 pp.

Henrichsmeyer, W. (1989) "Future Prospects of the CAP: SOme Comments from a German Perspective," **Europe 1992, CAP Reform and World Agricultural Trade**, Organized Symposia, AAEA 1989 Annual Meeting, Baton Rouge, Louisiana (July 31).

Josling, Tim (1989) "Europe 1992 and CAP Reform," **Europe 1992, CAP Reform and World Agricultural Trade**, Organized Symposia, AAEA 1989 Annual Meeting, Baton Rouge, Louisiana (July 31).

Kelch, D.R., Gardiner, W.H., and Neff, S. (1990) "Europe 1992: EC Economic Integration and World Trade Effects," *World Agriculture: Situation and Outlook*, Econ. Res. Serv., U.S. Dept. of Agr. (forthcoming--June).

Kelch, D.R., and Madell, M.L. (1990) "German Agriculture Faces Reunification, EC 1992 and GATT," paper submitted to the 1990 AAEA Summer Meetings, Vancouver, British Columbia.

Kelch, D.R., and Raney, T. (1989) "Europe 1992, GATT, & Food Safety: How Will U.S. Agriculture Fare?", AGRICULTURAL OUTLOOK. Econ. Res. Serv., U.S. Dept. of Agr., (Dec.), pp. 33-36.

Kelch, D.R., and Gardiner, W.H. (1989) "Europe 1992: Implications for Food and Agriculture," National Food Review, Vol. 12, Issue 4, Econ. Res. Serv., U.S. Dept. of Agr. (Oct.-Dec.).

Kelch, D.R., and Leuck, Dale (1989) "Political and Economic Factors Influencing Agricultural Policy Reform in the European Community and the United States", Contributed paper presented
at the Canadian Agricultural Economics and Farm Management Society, Montreal, Canada. (July), 16 pp.

Kelch, D. R. (1989) "Implications of Europe 1992 for the CAP", paper presented at the Inaugural Conference, **The European Community in The 1990's**, European Community Studies Association, George Mason University, Fairfax, VA (May) 15 pp.

Kelch, D.R. (1989) "Europe 1992: What's Ahead for Agriculture", Agricultural Outlook. Econ. Res. Serv., U.S. Dept. of Agr., (April), pp. 25-26.

Kelch, D.R. (1989) "The EEC 1992 Restructuring and Implications for Agriculture", International Agriculture Long-Term Forecast and Analysis. Special Analysis Article, The WEFA Group. (July) pp. 2-1 to 2-12.

Kelch, D.R. (1989) "Europe 1992: Implications for Agriculture" Western Europe: Agriculture and Trade Report. RS-89-2, Econ. Res. Serv., U.S. Dept. of Agr. (July) pp. 36-46.

Kelch, D. R. (1989) "The EC 1992 Harmonization Process and Implications for Trade", paper presented for an AAEA Organized Symposium. Europe 1992, CAP Reform, and World Agricultural Trade. Baton Rouge, La. (July) 10 pp.

Kelch, D.R. (1989) "The Future of the CAP after 1992", paper presented at Agricultural Seminar Series at the Zaragoza Regional Agricultural Center, Spain. (Jan.) 15 pp.

Kelch, D.R. (1989) "The EEC 1992 Restructuring and Implications for Agriculture", invited paper presented at WEFA Agricultural Outlook Conference. (April) 15 pp.

Kelch, D.R. (1989) "Europe 1992 and Agriculture", ERS Seminar. (April) 15 pp.

Kelch, D.R. (1988) "Europe 1992 and Agriculture", ERS Thursday Morning Briefing. (Oct.) 10 pp.

Leon, Yves, and Mahe, L.P. (1989) "The CAP and 1992 : A French Point of View," **Europe 1992, CAP Reform and World Agricultural Trade**, Organized Symposia, AAEA 1989 Annual Meeting, Baton Rouge, Louisiana (July 31).

Leuck, D., and Kelch, D.R. (1989) "Political and Economic Factors Influencing Agricultural Policy Reform in the European Community and the United States," Canadian Journal of Agricultural Economics, Vol. 37 (2).

Neff, S. (1989) "Europe 1992 and CAP Reform,". **ERS Panel Discussion, EC 1992, GATT and CAP Reform: Implications for Agricultural Trade**, ERS, Washington, DC (Aug. 7).

Mr. **Whitten**. Please provide a copy of the policy-related papers published under the title, Agricultural Food Policy Review.

Dr. **Lee**. We will gladly provide the Committee with a copy of Agricultural—Food Policy Review—U.S. Agricultural Policies in a Changing World.

[Clerk's note.—The full document is too lengthy to be reprinted. A copy has been retained in Committee files.]

IMMIGRATION REFORM AND CONTROL ACT

Mr. **Whitten**. Please provide the Committee with a synopsis of the results of your analysis of the demand for special agricultural workers to perform seasonal agricultural services.

Dr. **Lee**. USDA is responsible for estimating the need for special agricultural workers to perform seasonal agricultural services, SAS, for each fiscal year from 1990 to 1993 as specified in the Immigration Reform and Control Act of 1986. For FY 1990, the need forecast was 154.1 million work-days. The variables used to forecast need, as defined in the Act, and the FY 1990 estimate for each variable were: base work-days in SAS crops are equal to 146.1 million work-days; adjustment in base for economic loss is 1.3 million work-days; adjustment in base for technology and personnel practices is 0.1 million work-days; and adjustment in base for change in production of SAS crops is 6.6 million work-days.

Mr. **Whitten**. What further responsibilities do you have with regard to the Immigration Reform and Control Act?

Dr. **Lee**. In addition to estimating the need for special agricultural workers to perform seasonal agricultural services, a member of USDA serves in an advisory capacity to the Commission on Agricultural Workers. The Commission must address several major labor issues identified in the Act and report its findings and recommendations to the Congress.

Mr. **Whitten**. At one time you were working with the Department of Labor to make the H-2A, the Guest Worker Program, work for the livestock sector. Has there been any progress in this area?

Dr. **Lee**. Under the H-2A program, any agricultural employer who anticipates a shortage of domestic workers can apply for permission to bring into the United States nonimmigrant aliens to perform agricultural labor or services of a temporary or seasonal nature. The livestock sector is not excluded from the program. In fact, sheep herders have comprised H-2A, and its predecessor H-2, workers for a number of years.

FOOD SAFETY

Mr. **Whitten**. Please describe in some detail the work you now have underway in the area of food safety.

Dr. **Lee**. Ongoing food safety research in ERS includes a study of vegetable production acreage under integrated pest management, an assessment of private marketing initiatives to address food safety concerns of consumers, cosponsorship of a forthcoming conference on the economics of food safety, an assessment of the impact of the Alar scare on the apple market, a study of consumer perceptions and willingness to pay for safer seafood, and a study of lost productivity and medical costs associated with foodborne disease.

Additional ERS resources are allocated to monitoring current and emerging safety issues related to pesticide residues and bans on use, animal drug residues, and GATT and related trade issues.

ERS has published a number of reports on economic aspects of food safety. An entire issue of the National Food Review addressed the EC ban on hormones in beef, changing pesticide regulations, consumer perceptions and willingness to pay for safer poultry, strategic responses by the food industry, including third-party certification of fresh produce, economic incentives and regulations, and implications of trade harmonization of food safety and health related regulations. Several issues have been covered in our commodity Situation and Outlook Reports such as the economic impact of the Alar scare on apple farmers, emerging issues related to proposed fish and seafood inspection activities, and Salmonella contamination in poultry and eggs. Also, a recent Agriculture Information Bulletin and a chapter in Agriculture Food Policy Review address emerging food safety issues.

Mr. WHITTEN. How will your proposed increase of $1,600,000 for analysis of food safety issues relate to the pesticide and chemical use work currently underway or planned?

Dr. LEE. The majority of the proposed increase or $1,200,000, will augment pesticide and chemical use work currently underway and planned. This portion of the proposed increase would be used to analyze the effects on consumers and agricultural producers of agricultural and input policies, programs, and practices to reduce pesticide residues and their derivatives on foods where there could be a high potential for human dietary exposure to residues. The remaining portion or $400,000, will be used to analyze issues associated with animal drug residues, microbial contaminants, and GATT-related trade topics.

WATER QUALITY

Mr. WHITTEN. What is the status of the Agricultural Research Service Corn Belt Research Initiative and the Soil Conservation Service and Extension Service Demonstration Farms Initiative?

Dr. LEE. Planning and development of the Corn Belt Research Initiative has been underway for several years. In the past year, the ARS Initiative has been combined with the Geological Survey's Mid-Continent Herbicide Initiative to encompass an integrated, interagency research program to improve our understanding of water quality problems relating to agricultural chemicals and to develop new farming practices to address these problems. In the current fiscal year, both laboratory and onsite research efforts will be put in place. The Cooperative State Research Service has just received proposals from State cooperators to establish the first research sites in the Midwest to conduct the onfarm research, and site selection will be completed shortly.

USDA has selected the initial 8 demonstration project areas, with 16 more to be selected over the next 5 years. The overall goal of the projects is to demonstrate cost-effective agricultural practices that can be used and shared by farmers, the agribusiness community, and Federal, State, and local policymakers. The intent of the project is to accelerate the adoption of water quality technology that has been developed but has not yet achieved widespread recognition. The proposed projects span both surface and groundwater quality problems. Implementation will involve cooperative efforts among the Soil Conservation Service, Extension Service, ERS, Federal and State environmental agencies and land-grant universities.

Mr. WHITTEN. Please describe in some detail the work involved in these projects, the total cost, and the expected completion date.

Dr. LEE. USDA, in cooperation with the Geological Survey, EPA, and cooperating State agencies, has developed a multiagency research plan which focuses on protecting groundwater from agricultural chemicals. The plan identifies specific research goals which are to be achieved from 1990 through 1995. These goals include: research on the fundamental physical processes by which agricultural chemicals affect the environment; evaluation of farming systems which reduce the impact of agricultural chemical use; development of management systems and decision aids to help farmers apply these new farming systems; and technology transfer programs to hasten the adoption of new farming practices developed under the Initiative. This new research effort has been budgeted at $17 million for FY 1990, with $14.9 million funded. This new initiative, of course, is in addition to ongoing USDA water quality research. Total USDA budget for all water quality research in FY 1990 is $63.5 million.

The demonstration projects will involve the identification of water quality problems, identification of possible production practices and technologies to address the problems, design and implementation of educational, technical assistance, and cost-sharing plans to enhance adoption of the practices and technologies, and evaluation of the effectiveness of the adoption strategies. Five USDA agencies have committed $3.3 million to the projects in 1990. They are the Agricultural Stabilization and Conservation Service, $900,000 under the Agricultural Conservation Program in cost-share assistance to eligible farmers and ranchers who install the demonstration practices; the Economic Research Service, $150,000 in staff support to evaluate the economic effects of the program and practices to reduce chemical use in production agriculture; the Extension Service, $1 million for education and information regarding installation procedures and effects; the Forest Service, $100,000 to install improved forest management practices; and the Soil Conservation Service, $1.1 million in technical assistance for selecting and installing the demonstration conservation practices.

Mr. WHITTEN. What states are covered by the Administration's Water Quality Initiative?

Dr. LEE. The Midwest Corn Belt Research Initiative is focused on 11 States: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota, and Wisconsin.

The initial eight demonstration projects include: California, Sacramento Valley Demonstration Project, Butte, Colusa, Sutter, and Yuba Counties, to demonstrate the economic and environmental feasibility of pesticide management practices that reduce pesticide residue levels in irrigation return flow water; Florida, Lake Manatee Watershed Demonstration Project, Manatee County, to demonstrate the use of profitable irrigation and crop management systems, based on computer decision models, for the reduction of nutrient and pesticide loadings to surface and groundwater; Maryland, Monocacy River Watershed Demonstration Project, Carroll, Frederick, and Montgomery Counties, to focus on economically feasible and environmentally effective methods for farmers to reduce the application of fertilizers and properly manage animal wastes, thus reducing the potential to pollute surface and groundwater; Minnesota, Anoka Sand Plain Demonstration Project, Anoka, Benton, Chisago, Hennepin, Isanti, Mille Lacs, Ramsey, Sherburne, Stearns, Washington, and Wright Counties, to demonstrate cost-effective nutrient and crop management systems that reduce loadings of nitrates and pesticides in a ground-water recharge area; Nebraska, Mid-Nebraska Water Quality Demonstration Project, Adams, Butler, Clay, Fillmore, Hamilton, Kearney, Polk, Seward, York, and Webster Counties, to demonstrate crop and irrigated cropland the integrated use of cost-effective nitrogen, irrigation, and pest management to reduce chemical inputs, production cost, and ground-water contamination; North Carolina, Herrings Marsh Run Demonstration Project, northwestern Duplin County, to demonstrate crop and nutrient management systems that maintain farm profitability and reduce pesticide and nutrient loadings to both ground and surface water in areas with shallow ground-water tables; Texas, Seco Creek Demonstration Project, Bandera, Medina, and Uvalde Counties, to demonstrate cost-effective vegetative management systems to increase water yield and reduce pesticide and nitrogen leaching in a ground-water recharge area; and Wisconsin, East River Watershed Demonstration Project, Brown County, to demonstrate crop management systems that reduce the level of nitrogen, phosphorus, and pesticides required to produce competitive crops, thus enhancing farmer net income and reducing the loading of nutrients and pesticides to surface and groundwater.

PESTICIDE AND CHEMICAL USE

Mr. WHITTEN. On page 709 of the fiscal year 1990 hearing record you state that as part of your requested increase, the pesticide data collected will be statistically valid at the state level. A portion of this year's increase includes funds to make national pesticide use survey data statistically reliable at the state level. Please explain the difference between the two requests.

Dr. LEE. The request for fiscal year 1990 relates to pesticide use and contamination of surface and ground-water supplies. Such contamination generally results from the extensive use of important pesticides applied to major field crops. The pesticides principally involved are those used on major field crops which have leaching properties. However, pesticide use on other crops could have an effect on water quality, thus, there is a provision to include selected fruits and vegetables. However, the focus of this program is primarily on extensively used pesticides that are applied to major field crops.

The increase being requested for FY 1991 is to address issues related to food safety. The ERS request is for research and analysis of food safety issues and is not intended for data collection. However, there is an increase being requested by NASS to obtain detailed pesticide use information for crops that potentially have a high human dietary exposure to chemical residues, primarily fruits, vegetables, and nuts.

Thus, the increase requested for FY 1990 was to address water quality and the request for FY 1991 is related to food safety issues. The two programs are distinct but related and will complement each other.

Mr. WHITTEN. What is the status of the development of the farm and chemical data base?

Dr. LEE. A pilot survey was done related to water quality collected pesticide use data on cotton for 1989 in 14 producing States. The data obtained from the survey are now becoming available. Using the experience gained from this pilot effort, plans have been developed to conduct surveys of pesticide use on corn, soybeans, and fresh market tomatoes. The latter survey is a pilot test and has implications for both water quality and food safety, while the other surveys are designed primarily to address water quality issues. However, data from all the surveys have multiple uses.

Mr. WHITTEN. On page 23g-2 of the explanatory notes you state that your Resources and Technology Division will reestablish the pesticide use data base. How will this relate to your increase in 1990 for collection and analysis of pesticide and chemical use data and your proposed 1991 increase to expand chemical data collection?

Dr. LEE. The request for 1990 related to water quality whereas the request for 1991 addresses food safety issues. The 1990 request is primarily oriented to obtain information for widely used pesticides and related practices on major field crops. The 1991 request is for NASS to obtain information on pesticide use and production practice information for specialty crops that are consumed in the raw or processed form. The 1991 initiative focuses on crops such as fruits, vegetables, and nuts. ERS's portion is to analyze the economic implications of reducing chemical residues to promote food safety. Consequently, the two initiatives have individual but related objectives and functions.

FARM BORROWING

Mr. WHITTEN. What is the status of your planned study of the potential effects on farm borrowing of the new Farmer Mac and the secondary market program for Farmers Home Administration loan guarantees?

Dr. LEE. Since neither the Farmer Mac nor the Farmers Home Administration's secondary market is in operation, our research on their effects on farm borrowing is not as far along as we had planned. During fiscal year 1989, we published a thorough review of the Farmer Mac legislation and we worked closely with FmHA's staff to develop a data base for analyzing the impacts of its market. But thus far in fiscal year 1990, we've primarily monitored developments in both markets and undertaken analyses of the lenders that are likely participants in each market.

With regard to the Farmer Mac secondary market, ERS staff have evaluated the regulations and standards adopted by Farmer Mac and have provided the Farmer Mac staff with our comments on their proposals. In addition, we recently completed an analysis of the commercial banks that purchased Class A stock from Farmer Mac, banks that presumably plan to participate when the secondary market goes into operation. Including the affiliates of multibank holding companies, we identified nearly 1,900 commercial banks that purchased sufficient Class A stock to participate in the market as loan originators. These banks were heavily concentrated in 12 Corn Belt, Lake, and Northern Plains States and held 28 percent of the commercial banking system's total farm real estate debt and 36 percent of the system's farm production loans as of June 30, 1989. Because of this geographic concentration and the relatively small holdings of farm mortgages held by participating banks, we feel that Farmer Mac will have only a limited impact on the farm real estate market unless there is heavy participation by the Farm Credit System.

With regard to FmHA's secondary market, ERS research has concentrated on analyzing the participants in FmHA's guaranteed farm loan programs to better understand who might be affected when the secondary market becomes fully operational. A major effort was made to identify the 2,300 or so lending institutions that originated guaranteed farm loans during fiscal year 1988. The vast majority of these were commercial banks, but the Farm Credit System also originated nearly 20 percent of the guaranteed loans obligated that year. As with Farmer Mac, the distribution of participating banks is not uniform, some areas are served by several participating lenders while other areas have no participants. However, a well-functioning secondary market can only help encourage broader participation.

Mr. WHITTEN. Is the cost of these two studies to be the same as you estimated last year? If not, what will be the cost of each?

Dr. LEE. As I indicated last year, exact figures on the cost of these two studies are difficult to estimate. We do not routinely develop budgets for individual studies. Furthermore, since these two studies represent ongoing research that informally draws upon the resources of several different sections, even the cost of completed research can be considered only a rough estimate.

Thus far in fiscal year 1990, the cost of our Farmer Mac analysis is approximately $11,000. Since we were unable to acquire the information we planned to use to estimate prepayments of FCS farm mortgages, our work plans have been scaled back somewhat. We currently plan to refine our analysis of Farmer Mac banks and analyze the likely impacts of Farmer Mac's loan pooler regulations, for a total cost of approximately $20,000 this fiscal year, rather than the $37,000 we originally estimated.

The lack of a functioning market has also slowed our work in the FmHA secondary market. We plan to complete further analysis of the commercial banks participating in FmHA's guarantee program, and we hope to analyze the characteristics of a sample of FmHA guarantee program borrowers during the coming months. The results of these studies will serve as a baseline against which the impacts of the introduction of a formal secondary market can be

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measured. But unless the market begins operating very soon, our work will cost far less than the $65,000 we previously estimated. A good estimate at this point is that our FmHA secondary market research will cost $35,000 during fiscal year 1990.

EQUIPMENT

Mr. WHITTEN. Why did your equipment expenses for fiscal year 1989 more than double last year's estimate?

Dr. LEE. The fiscal year 1989 equipment estimate was low because a major ADP procurement to upgrade our in-house minicomputer that was planned for fiscal year 1988 actually occurred in fiscal year 1989 because of a vendor protest. Also, we overestimated salaries based on recruitment and retention expectations that turned out to be overly optimistic. We used the salary savings to continue our long-range objective of providing each employee with a microcomputer, linking work groups in local area networks, which takes an extra microcomputer per network, and linking the work groups via links to our minicomputer. At the same time, we are replacing depreciated microcomputers with ones that meet our new compatibility standards. The actual equipment expenditures fiscal year 1989 were more in line with the actual fiscal year 1988 expenditures than with our preliminary estimate of fiscal year 1989 expenditures.

Mr. WHITTEN. Please provide a sub-object class breakdown for the equipment account for fiscal years 1989, 1990, and 1991.

Dr. LEE. I will provide a sub-object class breakdown of equipment for the record.

[The information follows:]

ECONOMIC RESEARCH SERVICE—EQUIPMENT

	1989	1990	1991
ADP	$2,017,000	$1,189,000	$1,158,000
Other	261,000	200,000	380,000
Total, equipment	2,278,000	1,389,000	1,538,000

OTHER SERVICES

Mr. WHITTEN. What is the reason for the proposed $3.8 million increase in Other Services for fiscal year 1991?

Dr. LEE. The increase will enable ERS to purchase data and analysis, from other government agencies or private sources, needed for the proposed 1991 increases to expand chemical data collection and water quality analysis and for analysis of food safety issues.

Mr. WHITTEN. Please provide a sub-object class breakdown for the Other Services account for fiscal years 1989, 1990, and 1991.

Dr. LEE. I will provide a sub-object breakdown of Other Services for the record.

[The information follows:]

ECONOMIC RESEARCH SERVICE—OTHER SERVICES

	1989	1990	1991
Data acquisition (surveys)	$3,527,000	$4,836,000	$6,104,000
Training	358,000	344,000	346,000
ADP—primarily Kansas City Computer Center	1,193,000	1,072,000	1,580,000
Departmental assessments for central services and agencywide central services	1,042,000	1,030,000	1,075,000
Research agreements with State universities	1,689,000	554,000	2,554,000
Miscellaneous	137,000	194,000	200,000
Total, other services	7,946,000	8,030,000	11,859,000

ENVIRONMENTAL PROTECTION AGENCY

Mr. WHITTEN. Please tell the Committee what work you did in fiscal year 1989 and what you have ongoing in fiscal 1990 related to findings of the Environmental Protection Agency.

Dr. LEE. ERS conducts analyses of the economic implications of potential or actual EPA actions as they relate to agricultural producers, consumers, and the economy in general. These analyses principally have involved but have not been limited to pesticide regulatory action. Water quality, amendments to the FIFRA, endangered species, amendments to the FFDCA, and air quality issues have been addressed as well as pesticide regulation. In fiscal year 1989, ERS completed pesticide assessment studies for the insecticides ethyl parathion, carbofuran, and DDVP and completed a fumigant study. Also, work was initiated on EBDC fungicides, triazine herbicides, and insecticides naled, propoxur, mevinphos, and aldicarb. Analysis will continue on these studies in 1990, and a study of pesticide use in cotton production will be initiated. If EPA announces intended action for yet unidentified pesticides, studies will be initiated.

Mr. WHITTEN. What funds were expended in fiscal year 1989 and what do you expect to expend in fiscal year 1990 in this area?

Dr. LEE. In fiscal year 1989, ERS expended an estimated $940,000 for analyses and other work related to EPA. In fiscal year 1990, ERS expects to expend about $1.2 million for this work.

Mr. WHITTEN. ERS has expended $550,000 in 1987; $650,000 in 1988; and $940,000 in 1989 on activities related to the findings of the EPA. Why do you propose to delete appropriation language related to such activities, especially in light of the President's Food Safety Initiative?

Dr. LEE. The language is not required since ERS understands the wishes of the Committee. We have done this work in the past and will continue it in the future. In fact, the President's Food Safety and Water Quality Initiatives increase the importance of analyses of EPA proposals and findings, and, if funded, the initiatives will provide the data for greatly improving those analyses.

Mr. WHITTEN. If the Committee were to agree to this deletion, what impact would it have on the work you do related to findings of the EPA?

Dr. LEE. It would have no effect on the work of ERS. The intent of the Committee is well understood. ERS has been guided by this intent in the past and will continue following this guidance in the future. Our intent is to analyze the findings of EPA as they relate to agricultural producers, consumers, and the agricultural economy.

PRICE SPREAD BETWEEN THE FARMER AND THE CONSUMER

Mr. WHITTEN. Please bring the Committee up to date on your study of the price spread between the farmer and the consumer. What did you spend in fiscal year 1989 and what do you expect to spend in fiscal years 1990 and 1991 on this study?

Dr. LEE. Our study found that the spread between consumer prices for food and farm prices of commodities rose 7 percent in 1989, extending a long-term upward trend. That price spread, often called the marketing margin, represents the costs of processing and distributing foods and represents about 70 percent of the food dollar spent at the supermarket. Increases in the price spread reflect higher prices of most inputs used by the food industry, greater use of some inputs per unit of output, such as labor and advertising, and higher profit margins for some food companies. Labor use in food retailing has risen, reflecting the rapid growth of service departments to satisfy consumer demand for more convenient, ready-to-eat foods. The 6.5 percent rise in grocery store food prices experienced in 1989 was mainly the result of this increase in the farm-to-retail price spread. The rise in retail prices also reflected tighter supplies of some commodities, which resulted partly from the 1988 drought. The farm value of foods averaged about 7 percent higher, reflecting higher prices for many commodities. Other findings of the price study are in the Agricultural Information Bulletin No. 593, Food Costs—From Farm to Retail, which will be available and widely distributed including to the Committee, in March 1990. A more comprehensive report will be published later in the year.

ERS spent $480,000 on farm-to-retail price spread research in 1989. We expect to spend $500,000 in 1990, and $525,000 in 1991.

THE HISTORY OF THE DEPARTMENT OF AGRICULTURE

Mr. WHITTEN. Has the book-length study of The History of the Department of Agriculture been completed? If so, what was the final cost of the study? What is the sales price? How many books do you anticipate selling annually?

Dr. LEE. This history, an update to the centennial history of USDA which appeared in 1963, is near completion. In March, many of the agency sections will go to the appropriate agency for technical review. Overview material and introductions to chronological periods are still being written and are expected to be finished by summer. Final publication date will depend on how long it takes to edit and review the manuscript. It is anticipated that 5,000 copies of this book will be printed, including copies for land-grant universities and other libraries, members of Congress on the Agriculture and Appropriations Committees and their staffs, requests from the public, internal use, and general sales. Most sales will presumably occur in the first year or two, with declining sales thereafter. Cost estimates have ranged between $25,000 and $50,000. The book is projected to sell for between $13 and $20 per copy.

USER FEES

Mr. WHITTEN. How much did you collect in fees that you charged for your publications in fiscal years 1988 and 1989, and how much do you estimate collecting in fiscal years 1990 and 1991?

Dr. LEE. I will provide a table showing the amounts we collected from the sales of our publications in fiscal years 1988 and 1989 and what we estimate we will collect in fiscal years 1990 and 1991.

[The information follows:]

Actual—Fiscal year:	
1988	$49,000
1989	140,000
Estimate—Fiscal year:	
1990	200,000
1991	210,000

NON-FEDERAL FUNDS

Mr. WHITTEN. The amount of funds you received from non-Federal funds increased from $82,748 in 1988 to $255,026 in 1989. Is there a specific reason for such a large increase?

Dr. LEE. The amount of non-Federal funds we received in 1989 increased by $172,000 over 1988 primarily due to the increased sales of our publications, $91,000, and cooperative research with the National Honey Board and the Boll Weevil Foundation.

CROP INSURANCE PROGRAM

Mr. WHITTEN. Please provide the Committee a copy of the July 1989 study addresing crop insurance program options.

Dr. LEE. We will gladly forward to the Committee a copy of the study titled Federal Crop Insurance and the 1990 Farm Bill: An Assessment of Program Options, by Joseph W. Glauber, Joy L. Harwood, and Mario J. Miranda.

[CLERK'S NOTE.—The full document is too lengthy to be reprinted. A copy has been retained in the Committee files.]

Mr. WHITTEN. Why will you receive $50,000 in 1990 and 1991 for a crop insurance study in view of the Budget's proposal to terminate the program?

Dr. LEE. The $50,000 projection is based on what we received from OMB for a study of Federal crop insurance in 1989. We anticipate a continuing need for analysis of Federal crop insurance and disaster assistance issues through 1991 or until new legislation is passed.

STAFF-YEAR REDUCTION

Mr. WHITTEN. Who do you suppose a decrease of 15 staff years from 839 to 824 in 1991?

Dr. LEE. The lower number reflects a slight shift from inhouse research to more cooperative research with State universities, as we attempt to achieve an optimal mix between maintaining inhouse expertise and benefiting from the expertise of the staff at State universities.

Mr. WHITTEN. Why were your field positions phased out?

Dr. LEE. The ERS field staff has a long history and had an important purpose. Most land-grant universities did not have departments of agricultural economics in the first half of the century. The field staff was a means of recruiting and training the agricultural economists who were needed in the Federal Government. They were employed at their land-grant university on a part-time basis while they completed their advanced degrees in agricultural economics. This helped them financially and helped the school's attract a sufficient number of students to justify a department and separate curriculum for agricultural economists.

By the early 1930's, when we made the decision to phase out most of the field staff, the situation was different. Departments of agricultural economics were firmly established at most land-grant universities and at several other universities. A sufficient number of graduates with advanced degrees were available to fill ERS vacancies, although we now have trouble competing with the private sector in terms of salaries, so we didn't need to hire people before they finished their formal training.

In addition, the focus of ERS programs shifted from State-specific issues to problems of broad national significance and public concern. This shift in focus is a consequence of both the increasingly interdependence of U.S. agriculture with the rest of the U.S. economy and the rest of the world and of the reduction in resources, in real terms, appropriated to ERS.

We also felt the management efficiencies could be achieved by centralizing the staff. In 1981, we had 152 staff, in terms of full-time equivalents, located in 27 States. This dispersion made interaction among our field staff and Washington-based staff difficult. Also, management of projects that involved staff at different physical locations was difficult. By centralizing our staff, we have more flexibility to redirect resources to the highest priority work and more opportunities for synergistic interaction among our staff.

Mr. WHITTEN. Mrs. Smith?

STAFFING

Mrs. SMITH. One question, Dr. Lee. The Chairman pointed out that you used to have about 1,200 staff people and now you have about 800. How has this reduction in staff affected your agency and are you able to carry out the programs that you study and which you feel are so poor?

Dr. LEE. Thank you, Mrs. Smith.

First of all, I would like to say that we appreciate the fact very much that, in spite of very difficult budget decisions and conditions that have faced the United States over the last decade, this committee has continued, as well the Administration, to support ERS very well. There is always a tradeoff between, as you say, the reality that something has to give somewhere and the feeling that there are important things to be done, and you need a budget to do it.

Countless constituencies and thousands of people out there depend on ERS for a large amount of ongoing bread and butter work, just the ongoing things that we do. We provide basic situation and outlook analysis—nearly 100 reports each year—and it is from these that the whole industry operates.

ERS also provides monitoring and analysis of foreign economies and policies that affect international trade. We provide monitoring and assessments of conditions in the rural economy and a whole host of economic indicators on natural resources, farmer well-being, changing rural demographics, and performance of agricultural markets and trade, that thousands of regular users and people all over the country take for granted, but consider indispensable.

The Farmers Home Administration, for example, depends on ERS to provide projections necessary for evaluating farmers' loan applications. The Foreign Agricultural Service depends on ERS for a host of ongoing regular analyses, including the information that is needed to calculate the beef import quotas, and the information needed for the U.S.-Canada Free Trade Agreement.

There is a whole host of these kinds of things, a long list of them. Each year that goes by we are asked to address new analyses and add these new issues to our program, and we try to be responsive because we know these are important issues. Despite the fact that our actual budget has increased, our staff has decreased, and this is because of the increasing cost of doing business, and because most of the increases have been for data, not for staff.

We are trying to overcome the situation by improving efficiency of operations and, as a result, we think we can do more and do it better than we did it in earlier years, when we had more people. To do what we do today with the technology of the seventies would probably require more than 50 percent more people than we have today. Nevertheless, we, every year, face that very difficult choice of, with the resources we have, what do we do and what do we leave undone.

So we continue to try to address the important issues put before us by the Congress and the Administration. By saying yes to these, which we feel is our responsibility to do, we continue to erode our bread and butter base so that we don't have as large a base of commodity analysis and other things that we once had.

But we feel we have come a long way to overcoming those deficiencies by increasing efficiency.

Mrs. **Smith**. I appreciate you being here.

No more questions, Mr. Chairman.

Mr. **Whitten**. I heard you had 300,000 fewer farmers, 73 million acres lying idle, which gives you where you don't have as many folks to contact, do you?

Dr. **Lee**. We have fewer farmers to contact, yes sir.

Mr. **Whitten**. Mr. Natcher.

Mr. **Natcher**. No questions, Mr. Chairman.

Mr. **Whitten**. Mr. Akaka?

AGRICULTURAL AND TRADE RELATIONS WITH EUROPEAN COMMUNITY

Mr. **Akaka**. I also noticed in your budget justification that you intend to carry out a short history of agriculture, trade, and trade relations between the United States and the European Community.

Will you touch on the Common Market's program of sugar subsidy and the cost of this study?

Dr. **Lee**. The history study we are talking about would be a relatively inexpensive study, a study that one of our existing agricultural historians will conduct. I don't know the exact cost of that, but it will be the time of one historian.

Mr. **Akaka**. What commodities will be in the study?

Dr. **Lee**. The brief history of U.S. agricultural and trade relations with the European Community you ask about is still in the design phase. We plan to begin the actual study late this fiscal year and complete it in late 1991 or early 1992. Its publication was planned to coincide with the implementation of the Single European Act, the widely discussed "Europe 1992."

Frankly, we have not gotten far enough in the design of the project to know exactly how we will approach it. But we do not plan to focus on any commodity program, except as that is necessary to illustrate broad patterns and trends in the trade relations. This is not intended to be a detailed study of European policy on sugar.

We estimate the study will cost approximately $20,000, most of which will be incurred in FY 1991.

If you would like some comment on the European sugar program, perhaps Mr. Gardner could comment on that better than I could.

Mr. **Akaka**. I certainly would like that.

Mr. **Gardner**. You want comment in the study or now?

Mr. **Akaka**. In regards to sugar in the study.

Dr. **Lee**. We will include that in the response.

Mr. **Akaka**. When will this study be completed?

Dr. **Lee**. It is in this year's work plan. I am not sure when it will be completed. We will provide that information.

Mr. **Akaka**. The reason why I asked that question was last week I testified before the Ways and Means Committee on Trade, and I heard Deputy Trade Representative Julius Katz testify there and he was very candid in his characterization of the European Economic Community and the sugar program, and I want to read off his—here is how the EC supports sugar according to Mr. Katz.

One, the EC encourages domestic production through high internal support prices.

Two, the EC virtually prohibits imports through the use of a variable levy.

Three, the EC provides subsidies for a substantial quantity of exports.

Four, as a consequence of these policies, the EC has moved from being a net importer of one million tons of sugar in '70 to being a net exporter of 3.2 million tons of sugar in '88.

Given the outrageous policies of the EC, there is no reason I can see why we need to change our present sugar program until the Common Market agrees to reform its program. So we are very interested in the result of your reports.

Dr. **Lee**. Thank you.

GLOBAL COMMODITY MARKET STUDIES

Mr. **Akaka**. You currently have begun a series of global commodity market studies and one of these is on sugar. The information that I have obtained is that U.S. beet sugar growers are the seventh most efficient of the 31 beet producing countries. U.S. cane sugar ranks 33rd among 61 cane producing nations.

Is this information consistent with our studies of cost production around the world?

Dr. LEE. I don't remember exactly where the U.S. ranks in terms of efficiency and cost of production on those individual commodities. It sounds right, but we will provide you with a copy of our results as soon as those are completed, in early summer 1990.

TRADE POLICIES FOR SUGAR

Mr. AKAKA. Based upon what you know to date, how would liberalization of the trade patterns for sugar affect the United States?

Dr. LEE. The long-run average world price for raw sugar would likely rise to the 15-20 cents a pound range, compared to an average of about 10-11 cents over the past 10 years. The price received by the U.S. raw sugar producers would fall from 22-24 cents a pound to a range of 16-21 cents, a decline of about 10-30 percent. Domestic price variability would rise, while world price variability would fall.

U.S. sugar production would likely decline, while sugar consumption would increase slightly. Consumer expenditures on sugar would fall. High fructose corn sweetener producer margins would fall, but HFCS production would be maintained. U.S. sugar imports would rise.

Mr. WHITTEN. Mr. Skeen?

STAFFING LEVELS

Mr. SKEEN. It is good to have you here, gentlemen.

I note that this involves primarily staff, the ability to collect information, the ability to distribute and disseminate that information, and I think you do an excellent job.

My serious concern is, do you have enough in each of these categories to get your job done, especially given the fact that you have some rapidly moving and changing economic entities that affect agriculture throughout the world today, particularly Eastern Europe? Are you doing a model on what the benefits could be to American agriculture as far as the change in Eastern Europe, and what the obstacles are from our viewpoint?

Dr. LEE. I won't call it a formal model, but we are addressing the whole question of what the significance and implications of the developments in Eastern Europe are, and we have some staff who are very knowledgeable about agriculture in Eastern Europe and have been monitoring developments there for years. We don't have a large staff, but a few people. They have been watching it closely and have done key assessments.

The key is to figure out where that is going, and how that is going to affect not only democratization of individual countries, and if that leads to a change in the relationship between those countries and the rest of Europe. If the Soviet Union were to be drawn into that European connection, that could change not only geopolitical forces, but could have a big impact on market forces and directions. We are trying to sort out what that would mean under a number of scenarios. We don't have a formal model, but it can be done with the people we have.

Mr. SKEEN. Do you have much flexibility with your staff? Every time you come before this group you pick up three or four new items that is of great interest to members of this subcommittee, and Congress at large.

What I am really concerned about is how quickly you can flex into a study that arises and do you have that capability in your estimation, and if not, what would it take to give you that kind of flexibility, besides more money and equipment, et cetera?

Dr. LEE. We have considerable flexibility. We try to hire people who are good economists and can switch from one subject to another. In a subject like Europe you build up expertise through years of experience. We do have a lot of flexibility. We redirect a lot of resources each year to try to address the priorities.

We are relatively well funded. No one ever has all the resources you would like to have to get everything done that you feel you should do, but we are in relatively good condition.

FOOD SAFETY

Mr. SKEEN. I have been just a little bit amazed and somewhat disconcerted by the fact that we have all these food scares that occur from time to time. It becomes almost fadish. Does your organization provide the information about the natural carcinogens in a good group? I want to comment whoever came up with that ingenious document. It puts this issue in perspective.

We have all these interest groups running around talking about the dangers of pesticides, and somebody had to point out that naturally occurring carcinogens probably cause as much of a problem.

Is this a great ongoing study with natural carcinogens in food?

Dr. LEE. We have had two people specializing in looking at natural as well as the artificially introduced carcinogens, and that material you just referred to did come out of research done in our economic research group.

We are continuing to try to put the whole food safety issue in a perspective that would be useful for directing research and regulatory efforts in the future, and also to try to put into perspective for farmers and consumers just what the problems are and what they are not.

Mr. SKEEN. Well, that is the important part. Unless we have a scientific background that you can rely on, from information that you folks certify, I think that it lends itself to a lot of abuse as far as media is concerned.

Of course, teaching them to report is something else again. You are not responsible for that. But at least the information is available.

LANGUAGE CHANGE

Mr. WHITTEN. Thank you for your appearance. You know, it bothers me, and I am trying to compliment you for the job you did in presenting your side of it, but in checking the record, I find that you cut out or asked us to cut out the following language, which appears on page 23-6 of your explanatory notes:

> Of which $500,000 shall be available for investigation, determination and finding as to the effect upon the production of food and upon the agricultural economy of any proposed action affecting such subject matter pending before the Administrator of the Environmental Protection Agency for presentation, in the public interest,

before said Administrator, other agencies or before the courts: Provided, That this appropriation shall be available to continue to gather statistics and conduct a special study on the price spread between the farmer and the consumer.

Provided further, that this appropriation shall be available for analysis of statistics and related facts on foreign production and full and complete information on methods used by other countries to move farm commodities in world trade on a competitive basis.

This is highly important now. From reading the papers each day we have an open door policy on products from anywhere. We are promising somebody else that we will give you a ready market which destroys the domestic market.

How much of this $500,000 has been used? We say it shall be available. Have you used any of it?

Dr. LEE. Yes, Mr. Chairman, in fact each year we have used considerably more than the guidelines have suggested in these three categories.

Mr. WHITTEN. Give us a report for the record on what you have done, how much you have spent and what conclusions you came up with.

Dr. LEE. I will do that.

Mr. WHITTEN. You want to delete this language? You have asked Congress to delete it when we need it now more than ever. Now, let me say, contrary to what the Administration believes, we have always supported the EPA. In fact, this committee financed it for a long time, and we made an effort to keep it within the limits of the law.

And after four years of working with EPA, I had some speeches made that were absolutely false. We supported the EPA, but we supported keeping it within the limits of what it was available for under the law. As I told you, they say we shouldn't use anything unless we prove it is absolutely safe. At least some folks said that.

We have made funds available.

You saw fit to use these funds in the past, but now you want to delete them. Is there pressure from on high?

Dr. LEE. This is part of a sort of general policy on the part of OMB to keep the language in the appropriations as unrestrictive as possible.

Mr. WHITTEN. OMB told you to propose these deletions?

Dr. LEE. Let me just say that we fully intend to do the work.

Mr. WHITTEN. I want you to answer my question.

Dr. LEE. We are not unhappy with the priorities that you enunciate in the language, and we intend——

Mr. WHITTEN. You are not telling us a whole lot of other things that you care us to do something about. You mean what you told us?

Dr. LEE. Yes, sir.

Mr. WHITTEN. And this is what you tell us, to cut it out. I am asking you to tell us who told you to?

Dr. LEE. It is part of a governmentwide or, if you will, yes, it is part of a general practice on the part of OMB and agencies——

Mr. WHITTEN. Throughout the government?

Dr. LEE. Yes, sir, to——

Mr. WHITTEN. I am not surprised to hear this, but I am surprised that you bought it. Did you argue back with them?

Dr. **Lee**. Well, yes, sir, we did.

Mr. **Whitten**. You are guessing. I want to know what the facts are.

Dr. **Lee**. We did. We agree with the priorities that you enunciate.

Mr. **Whitten**. Don't you think that we should put this money back and then put another $500,000 in there so you will give us a list of imports and their effect on domestic production, sales and income? Put another $500,000 in for that purpose. Would it strengthen your hand?

Dr. **Lee**. We would not object at all, we would be happy to do that kind of work.

Mr. **Whitten**. Thank you. We appreciate your appearance here today.

STATEMENT OF
BRUCE GARDNER
ASSISTANT SECRETARY FOR ECONOMICS
U.S. DEPARTMENT OF AGRICULTURE
BEFORE
THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
RURAL DEVELOPMENT, AGRICULTURE AND RELATED AGENCIES

FEBRUARY 26, 1990

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to be here today with the heads of our Economic Agencies as they present their statements for the FY 1991 Budget.

Dr. John Lee is Administrator of the Economic Research Service (ERS). The mission of ERS is to provide economic information about U.S. agriculture and the rural economy, and to carry out the economic analysis of events and policies that affect farms and rural people.

Concerns about environmental quality and food safety are placing new demands on ERS. To meet these demands, two major research initiatives for ERS in FY 1991 are food safety, including agricultural chemical use, and water quality. Given the interdependency of U.S. and world agriculture, ERS also faces increasing demands to assess emerging international developments for U.S. agriculture, such as those in Eastern Europe and the Soviet Union.

Charles Caudill, Administrator of the National Agricultural Statistics Service (NASS), will present the budget statement for the Department's fact-gathering agency. NASS publishes reports detailing current production and estimating prospects for crops, livestock, dairy, and poultry. Other releases provide information on items such as commodity stocks, prices, farm labor, and weather. These data are widely used by farmers, agribusinesses, trade groups, financial organizations, and policy officials.

The demand for agricultural statistics continues to grow in terms of both scope and reliability. The main NASS initiatives for FY 1991 include providing additional information on agricultural chemicals as they relate to food safety and new data for agricultural labor and wage rates. Also, plans are to improve the overall sampling frame for agriculture which will lead to more reliable and accurate surveys and results.

Lastly, I have with me Jim Donald, who chairs the World Agricultural Outlook Board (WAOB). WAOB's chief responsibility is to coordinate the Department's global crop and livestock supply/demand estimates. In recent years, WAOB has been increasingly called upon to provide information on climati developments as they relate to U.S. and world agriculture. WAOB was at the forefront during the 1988 and 1989 droughts in assessing weather conditions and the likely impacts on U.S. agriculture. To help meet growing demands for weather related data, WAOB plans for FY 1991 call for improvements in weather information systems and an expansion of its meteorological data base.

Mr. Chairman, that concludes my statement. We will now proceed with our agency budget statements unless you have any questions at this point.

ECONOMIC RESEARCH SERVICE

Statement of John E. Lee, Jr., Administrator, before the Subcommittee on Rural Development, Agriculture, and Related Agencies.

Mr. Chairman and members of the committee, I am pleased to appear before you again; this time to present our proposed budget for FY 1991.

The 1990's will be challenging for American agriculture. The dramatic changes in Eastern Europe and the Soviet Union could affect the entire global geopolitical balance, reshape world markets, alter the policy and spending priorities of nations, and shape the future of American agriculture. Changes will occur, along with their attendant risks and uncertainties.

Congress and the Administration will respond to the needs of farmers and rural Americans as they adjust to the changing world. What those needs will be and what the public policy response to them will be are uncertain; what is certain, however, is that policymakers will need accurate, objective, and timely economic analysis of the costs and benefits (and their distribution among various sectors of the economy) of alternative policies and programs. That is where the Economic Research Service comes in, with its economic analysis and monitoring programs. And that is why the Administration has again demonstrated its support for the programs of the Economic Research Service in its FY 1991 budget request.

Our FY 1991 budget request is for $56 million, a $5-million or 10-percent increase over what you appropriated for ERS in FY 1990. This increase is comprised of two program initiatives and funds for some pay-cost increases.

Food Safety Initiative

ERS's FY 1991 budget request includes an increase of $1.6 million for analysis and evaluation of primary and secondary information and survey data on food safety issues and agricultural chemical use to provide analytic support for USDA food safety and pesticide assessment activities and the evaluation of the costs and benefits of alternative public and private control strategies; and to assess the impact of pesticide regulation and residue control programs on food safety.

These activities will focus on impacts on yields, production, input use, consumer supplies and prices, farm incomes, government program costs, production costs, international competitiveness, worker safety, and the overall quality of the environment.

Food safety is a potentially explosive issue that can, because everyone involved may not have complete information on or understanding of the risks, disrupt markets and cause substantial losses to consumers, marketers, producers, and suppliers of agricultural inputs. Concern about food safety has increased significantly in recent months. The issues and concerns span the entire spectrum of hazards from manufactured agricultural chemicals and animal drugs to naturally occurring microbial hazards such as salmonella in meat and poultry and aflatoxin in grains and peanut butter. In addition, new safety issues are being raised by biotechnology. The entire food system has been affected, from farms and farm workers to marketers, processors, retailers, and consumers. Significant concerns at home and abroad have also been raised about the safety of agricultural imports and exports.

ERS's FY 1991 Food Safety Initiative, which is a component of USDA's departmentwide Food Safety Initiative, calls for developing a broad framework within which to design expanded data collection activities, do cross-disciplinary research, and support informed public policymaking and program management and expanded public education. Without this framework, the potential for translating research findings into more timely, cost-effective programs and private sector practices is limited.

Here are a few illustrative examples of the questions that ERS will try to answer:

1. How will not using or reducing the residue level of a particular pesticide affect farmers' profits and consumers' costs?
2. What are the economic costs to society of continuing to use a particular pesticide and what are the distribution of those costs among various groups and/or regions?
3. If pesticides were regulated only for farmers who participate in Government programs, what would be the overall effectiveness of the regulation and the distribution of costs and benefits?
4. How will consumers respond to the tradeoff between price and exposure to risk?
5. How will food retailers behave and how will their behavior affect producers and consumers?

6. How will U.S. food safety regulations affect U.S. competitiveness in international trade?

Water Quality Initiative

ERS's FY 1991 budget request includes an increase of $2.1 million to enhance the statistical reliability of agricultural chemical use data. This will include building and maintaining an expanded data base in cooperation with NASS and providing analytical components of the Department's water quality initiative along with SCS, ES, ASCS, ARS, and CSRS. While contributing mainly to the goals of the President's Water Quality Initiative, these activities will complement food safety analytical capabilities.

Concern is growing among farmers, rural communities, input suppliers, consumers, and State governments about the presence of agricultural chemicals in water systems, particularly ground water. The President's FY 1990 Water Quality Initiative outlines a long-term, challenging, multiagency program to develop information and analytical bases for addressing and resolving these concerns.

USDA's Water Quality Program, which comprises the bulk of the President's initiative, has three major components:

1. research and development activities aimed at improving understanding of the mechanisms by which agricultural activities affect water quality, and developing new technologies and management systems that maintain agricultural productivity while reducing the chance of water degradation.

2. education and technical assistance efforts to encourage and assist producers in applying new and improved agrichemical and waste management and production practices; and
3. development and analysis of comprehensive, consistent, national data bases that permit evaluation of the economic consequences of alternative policies for reducing the adverse effects of agricultural activities on water quality.

ERS will play an active role in each of the major components of the USDA water quality program and is a lead agency for the program's Data Base Development and Evaluation component.

Historically, ERS, in cooperation with NASS, collected detailed pesticide use data at the national and regional levels. National pesticide use data collection was scaled back during the 1970's and was discontinued in 1982 because of shifting priorities and dramatic increases in the costs of such survey efforts. While FDA monitors food for pesticide residues and USDA monitors food for naturally occurring toxins, no data are available to associate farm practices with food safety measures or to help target monitoring activities.

Erosion of ERS's "Bread and Butter" Activities

The FY 1991 budget calls for ERS to "absorb" the FY 1990 pay raise and half of the proposed FY 1991 pay raise as well as all nonsalary cost increases in those years. This and past "absorptions" of inflation in pay and other costs have taken a heavy toll on ERS's mainstay programs of domestic commodity analysis, world agricultural market analysis, and rural development research and monitoring. I fully appreciate that when the Administration proposes and Congress enacts an appropriation act that implicitly asks us to "absorb" the increased costs of doing business, it is your intent that we somehow produce the same level of program with fewer resources; otherwise, you would tell us what to stop doing. We try our best to do that through increased efficiency. But that increased efficiency will occur anyway, without being driven by necessity, largely as a function of adoption of new information technology. And given the virtually limitless demands for economic information, we could have been using that increased efficiency to expand our responsiveness to those demands rather than to just try to keep up with inflation.

The fact that ERS's budget has been nominally increasing over the years belies the fact that the real purchasing power of the funds has declined due to inflation. This point is best illustrated by the number of staff that ERS can afford to maintain. That number dropped below 800 in FY 1988 and FY 1989; down from a historical high of over 1,200. The FY 1991 staff-year ceiling for ERS is 835.

Domestic Commodity Analysis. ERS conducts a program of economic outlook and intelligence, analysis, research and associated work relating to domestic and international aspects of agricultural commodities. ERS develops and maintains national and international estimates and forecasts of production, trade, consumption, and prices of commodities. The information is used by farmers, consumers, traders, analysts, policymakers, and other decisionmakers in the food and fiber system.

To improve agricultural profitability, American farmers need up-to-date data and economic analysis about production, demand, and prices for their farm products.

Such information helps farmers evaluate economic conditions and determine when to buy and sell. Consumers, policymakers, and others need the data and analysis to make informed decisions relating to consumption, policymaking, program management, and competitiveness.

World Agricultural Market Analysis. The world has changed dramatically during the last decade, and more changes are expected. World financial and commodity markets have become global and interdependent. Technological change occurs at an increasing rate. Technology is transferred among countries with increasing speed. Changing competitive conditions elicit both increasingly protectionist policies and efforts to reform national policies and liberalize world markets. The centrally planned economies are in the midst of major political and economic reform as their populations seek better economic conditions and greater political freedoms. The less developed countries are under great stress as they struggle with internal policy reform and staggering debt burdens. The European Community is seeking total economic integration of its different national economies. This integration will require profound changes in individual countries and critical decisions on how an integrated Europe will relate to the rest of the world. Japan is undergoing great change and stress in adjusting to its relatively new role as an economic superpower. The economic positions of countries in the global economy continue to change. Some countries are rapidly gaining influence and others are losing influence.

USDA must have the capacity to understand, anticipate, and analyze these changes and their implications. Economic research helps decisionmakers anticipate forces for change and understand how changes affect the role of U.S. agriculture in world markets.

Rural Development Research and Monitoring. Gaps exist between urban and rural people in income, employment opportunities, community economic viability, and overall standard of living.

Lower per capita incomes and less access to national levels of public services, plus higher unemployment and poverty rates make rural life increasingly difficult for many individuals. Together with a declining farm population and low rates of new job formation in other sectors, those factors are causing population losses in rural communities in many States.

Research on economic problems and measures that local leaders and public officials at the local, State, and national levels can adopt to promote rural community economic development is vital. Because the agricultural sector is a relatively small and steadily shrinking employer of rural people, economic development must focus largely on other economic sectors where growth is possible. And building a more sustainable economic base for rural areas benefits farmers as well as the nonfarm majority. It provides the sources of income that allow many to continue farming and protects farmers in some regions from living in ever greater isolation.

The small and diminishing rural economic development research and monitoring program in ERS, often cooperating with researchers at land-grant universities, is by far the largest source of information for policymakers at every level of government on rural conditions, rural economies and their problems, and analytically based development options.

Concluding Remarks

Despite the decline in resources, we recognize the need to do our part in helping to reduce the Federal budget deficit. Our FY 1991 budget request, therefore, calls for absorbing some portion of the increased costs of doing business. We will attempt to minimize the impact of this by working to achieve greater operating efficiencies wherever we can. And we will continue to redirect our base resources to the highest priority work, as the issues and needs for economic analysis evolve.

ERS has been a good steward of the resources entrusted to it by the American public. As we approach the challenging times ahead, I want to reaffirm to you that I will continue to take that stewardship seriously.

Thank you, and I will be happy to respond to your questions.

ECONOMIC RESEARCH SERVICE

Purpose Statement

The Economic Research Service (ERS), was established in 1961 principally under the authority of the Agricultural Marketing Act of 1946 (7 U.S.C. 1621-1627).

ERS's mission is to provide economic and other social science information and analysis for improving the performance of agricultural and rural America.

ERS produces such information as a service to the general public and to help Congress and the administration develop, administer, and evaluate agricultural and rural policies and programs. ERS monitors, analyzes, and forecasts U.S. and world agricultural production and demand for production resources, agricultural commodities, and food and fiber products. ERS also measures the costs of and returns to agricultural production and marketing; evaluates the economic performance of U.S. agricultural production and marketing; and estimates the effects of Government policies and programs on farmers, rural residents and communities, natural resources, and the public. In addition, ERS produces economic and other social science information about the organization and institutions of the U.S. and world agricultural production and marketing systems, natural resources, and rural communities.

ERS-produced information is made available to the public through research monographs, situation and outlook reports, standardized data products in electronic media, professional and trade journals (including The Journal of Agricultural Economics Research), magazines (including Agricultural Outlook, Farmline, National Food Review, and Rural Development Perspectives), radio, television, newspapers, and frequent participation of ERS staff at various public forums.

ERS has four program divisions--Commodity Economics, Agriculture and Trade Analysis, Resources and Technology, and Agriculture and Rural Economy--that carry out the four principal functions of ERS: research, situation and outlook analysis, staff analysis, and development of economic and statistical indicators. Research and economic and statistical indicators provide the knowledge base and the data base for the situation and outlook and staff analysis functions. The products of the situation and outlook analysis function are periodic reports that analyze the current situation and that forecast the short-term outlook for major agricultural commodities, agricultural exports, agricultural finance, agricultural resources, and world agriculture. Staff analysis entails assessments of issues requiring policy decisions by the administration and Congress.

ERS is located in Washington, D.C. As of September 30, 1989, ERS had 769 permanent, full-time employees and 41 part-time employees.

ECONOMIC RESEARCH SERVICE

Available Funds and Staff-Years

1989 Actual and Estimated 1990 and 1991

Item	1989 Actual		1989 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff Years
Economic Research Service ...	$49,436,000	775	$50,689,000	839	$56,262,000	824
Obligations under other USDA appropriations:						
Agricultural Marketing Service for study of marketing of U.S. agricultural products	74,536	—	100,000	—	100,000	
Animal and Plant Health Inspection Service for pest management studies ...	35,000	—	—	—	—	
Agricultural Research Service for evaluation studies	35,536	—	40,000	—	40,000	
Cooperative State Research Service for review of agricultural research projects	125,829	2	100,000	1	100,000	1
Extension Service for support of Great Plains Council	7,536	—	—	—	—	—
Foreign Agricultural Service for international trade studies	20,000	—	14,000	—	14,000	—
Federal Crop Insurance Corporation for OMB crop insurance study	186,219	1	50,000	1	50,000	1
Federal Grain Inspection Service for grading and price impact studies	71,931	1	46,000	1	46,000	1
Farmers Home Administration for study of wastewater needs in rural areas	9,223	—	—	—	—	—
Human Nutrition Information Service for analysis of food consumption survey	50,469	—	46,000	—	46,000	—
National Agricultural Statistics Service for aquaculture study	105,000	3	5,000	—	5,000	—
Packers and Stockyards Administration for personnel detail	64,862	1	35,000	—	35,000	—
Soil Conservation Service for support of Great Plain Council	7,536	—	—	—	—	—
World Agricultural Outlook Board for purchase of survey data	5,000	—	5,000	—	5,000	—
Total, Other USDA Appropriations	798,677	8	441,000	3	441,000	3
Total, Agriculture Appropriations	50,234,677	783	51,130,000	842	56,703,000	827

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Other Federal Funds:						
Agency for International Development for personnel detail	12,191	—	15,000	—	15,000	—
Bureau of Reclamation, USDI: for personnel detail	—	—	8,000	—	8,000	—
Council of Economic Advisors for personnel detail	—	—	30,000	—	30,000	—
Forest Service for support of Great Plains Council	7,536	—	10,000	—	10,000	—
Office of International Cooperation and Development: for personnel details and food aid studies	864,162	8	986,000	7	986,000	7
Office of Management and Budget for personnel detail	6,905	—	10,000	—	10,000	—
Total, Other Federal Funds	890,794	8	1,059,000	7	1,059,000	7
Non-Federal Funds:						
Miscellaneous Contributed Funds for Boll Weevil Foundation, National Honey Board, publication & data sales, and other private organizations	255,026	1	267,000	1	200,000	1
Total, Non-Federal Funds	255,026	1	267,000	1	200,000	1
Total, Economic Research Service	51,380,497	792	52,456,000	850	57,962,000	835

Full-time Equivalent Staff-Years:	1989 Actual	1990 Estimated	1991 Estimated
Ceiling	792	850	835
Non-ceiling	—	—	—
Total	792	850	835

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Other Federal Funds:						
Agency for International Development for personnel detail	12,191	—	15,000	—	15,000	—
Bureau of Reclamation, USDI: for personnel detail	--	—	8,000	—	8,000	—
Council of Economic Advisors for personnel detail	—	—	30,000	—	30,000	—
Forest Service for support of Great Plains Council	7,536	—	10,000	—	10,000	—
Office of International Cooperation and Development: for personnel details and food aid studies	864,162	8	986,000	7	986,000	7
Office of Management and Budget for personnel detail	6,905	--	10,000	—	10,000	—
Total, Other Federal Funds	890,794	8	1,059,000	7	1,059,000	7
Non-Federal Funds:						
Miscellaneous Contributed Funds for Boll Weevil Foundation, National Honey Board, publication & data sales, and other private organizations	255,026	1	267,000	1	200,000	1
Total, Non-Federal Funds	255,026	1	267,000	1	200,000	1
Total, Economic Research Service	51,380,497	792	52,456,000	850	57,962,000	835

Full-time Equivalent Staff-Years:	1989 Actual	1990 Estimated	1991 Estimated
Ceiling	792	850	835
Non-ceiling	—	—	—
Total	792	850	835

ECONOMIC RESEARCH SERVICE

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

	1989	1990	1991
Personnel Compensation:			
Headquarters..............	30,879,346	32,436,000	33,675,000
Field.....................	134,799	39,000	0
11 Total personnel compensation........	31,014,145	32,475,000	33,675,000
12 Personnel Benefits...	5,090,865	5,627,000	5,792,000
13 Benefits for former personnel...........	18,688	19,000	21,000
Total Pers. Comp. & Benefits............	36,123,698	38,121,000	39,488,000
Other Objects:			
21 Travel.................	720,183	739,000	802,000
22 Transportation of things..............	77,625	80,000	86,000
23.3 Communications, utilities and miscellaneous charges..	1,054,179	1,082,000	1,174,000
24 Printing and reproduction.......	427,654	469,000	476,000
25 Other services........	7,945,743	8,030,000	11,859,000
26 Supplies and materials...........	753,461	779,000	839,000
31 Equipment............	2,277,933	1,389,000	1,538,000
Total other objects.....	13,256,778	12,568,000	16,774,000
Total direct obligations..	49,380,476	50,689,000	56,262,000
Position Data:			
Average Salary, ES positions.............	$76,714	$79,275	$96,716
Average Salary, GM/GS positions.............	$39,533	$40,550	$41,969
Average Grade, GM/GS positions.............	11.0	11.0	11.0

ECONOMIC RESEARCH SERVICE

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Economic Research Service:

For necessary expenses of the Economic Research Service in conducting
economic research and service relating to agricultural production,
marketing, and distribution, as authorized by the Agricultural Marketing
Act of 1946 (7 U.S.C. 1621-1627), and other laws, including economics of
marketing; analyses relating to farm prices, income and population, and
demand for farm products, use of resources in agriculture, adjustments,
costs and returns in farming, and farm finance; research relating to the
economic and marketing aspects of farmer cooperatives; and for analysis
of supply and demand for farm products in foreign countries and their
effect on prospects for United States exports, progress in economic
development and its relation to sales of farm products, assembly and
analysis of agricultural trade statistics and analysis of international
financial and monetary programs and policies as they affect the
competitive position of the United States farm products, [$51,102,000]
$56,262,000 [of which $500,000 shall be available for investigation,
determination and finding as to the effect upon the production of food
and upon the agricultural economy of any proposed action affecting such
subject matter pending before the Administrator of the Environmental
1 Protection Agency for presentation, in the public interest, before
said Administrator, other agencies or before the courts:
Provided, That this appropriation shall be available to continue
to gather statistics and conduct a special study on the price
spread between the farmer and the consumer]: Provided [further],
That this appropriation shall be available for employment pursuant
to the second sentence of section 706(a) of the Organic Act of
1944 (7 U.S.C. 2225)[: Provided further, That this appropriation
shall be available for analysis of statistics and related facts on
2 foreign production and full and complete information on methods used
by other countries to move farm commodities in world trade on a
competitive basis].

The two changes in language propose deletion of dollar floors and related provisions on EPA actions, price spreads, and foreign production and competition that are part of the ERS ongoing program.

ECONOMIC RESEARCH SERVICE

Appropriation Act, 1990		$51,102,000
Budget Estimate, 1991		56,262,000
Increase in Appropriation		+5,160,000
Adjustments in 1990		
Appropriation Act, 1990	$51,102,000	
Gramm-Rudman-Hollings Reduction (P.L. 99-177).......................	-513,000	
Activities transferred from National Agricultural Statistics Service a/ ..	+100,000	
Adjusted base for 1990		50,689,000
Budget Estimate, 1991		56,262,000
Increase over adjusted 1990		+5,573,000

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a/ Pursuant to an agreement between the Economic Research Service and the National Agricultural Statistics Service $100,000 for an aquaculture situation and outlook report will be transferred to the Economic Research Service from the National Agricultural Statistics Service for FY 1990. On a comparable basis, the full annual cost of the activity is $100,000 for FY 1990 and $100,000 for FY 1991.

Summary of Increase
(On basis of adjusted appropriation)

Item of Change	1990 Estimated	Pay Cost	Program Changes	1991 Estimated
Economic Analysis and Research...........	$50,689,000	+$1,848,000	+$3,725,000	$56,262,000

Project Statement

(On basis of adjusted appropriation)

	1989 Actual		1990 Estimated		Increase	1991 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
Economic Analysis and Research.....	$49,380,476	775	$50,689,000	839	(1) +$5,573,000	$56,262,000	824
Unobligated Balance......	55,524	—	—	—	—	—	—
Total available or estimate......	49,436,000	775	50,689,000	839	+5,573,000	56,262,000	824
Transfer from National Agricultural Statistics Service.......	-100,000	--	-100,000	—	—	—	—
Gramm-Rudman Holling Reduction ...	—	—	+513,000	—	—	—	—
Total, Appropriation.	49,336,000	775	51,102,000	839			

EXPLANATION OF PROGRAM

The appropriation for the Economic Research Service funds the following activity:

— Economic analysis and research—This activity includes research, situation and outlook analysis, staff analysis, and development of economic and statistical indicators in the four major program areas—commodity economics, agriculture and trade analysis, resources and technology, and agriculture and rural economy.

GAO Report GAO/RCED-89-75BR 3/89, Pesticides: Economic Research's Analysis of Proposed EPA Actions.

JUSTIFICATION OF INCREASES

(1) An increase of $5,573,000 for economic analysis and research consisting of:

(a) A total increase of $1,848,000 to restore the 4.1-percent pay raise effective in January 1989 ($1,300,000) and a FY 1991 pay raise of 3.5-percent ($548,000). (The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.)

Need for Change. The first increase of $1,300,000 is to restore the 4.1-percent pay raise effective January 1989 and $500,000 to provide for the unabsorbed half of a proposed 3.5-percent pay raise effective January 1991 and to enable ERS to maintain its budget at the current services level.

(b) An increase of $1,600,000 for analysis of food safety issues ($325,000 available in 1990).

Need for Change. This increase of $1,600,000 is in support of the Administration's Food Safety Initiative. For its part, ERS will provide analysis evaluation of primary and secondary information and survey data in food safety issues and agricultural chemical use to:

. provide analytic support for USDA food safety and pesticide assessment activities and the evaluation of the costs and benefits of alternative public and private control strategies; and

. assess the impact of pesticide regulation and residue control programs on food safety.

Nature of Change. Both activities will focus on impacts on yields, production, input use, consumer supplies and prices, farm incomes, government program costs, production costs, international competitiveness, worker safety, and the overall quality of the environment. This increased focus on data management, analysis, and policy evaluation requires separate activities to collect pesticide use and food safety-related data.

(c) An increase of $2,125,000 to expand chemical data collection and water quality analysis ($2,600,000 available in 1990).

Need for Change. This increase of $2,125,000 is in support of the Administration's Water Quality Initiative. For its part, ERS will provide statistically reliable agricultural chemical use data in States covered by Water Quality Initiative and analytical support for water quality programs. In response to the needs of USDA and other Federal agencies for research, education, technical assistance, and pesticide benefit-cost and risk managements, ERS will expand water quality-related data collection and economic and policy analysis. While the FY 1990 budget increase reestablished ERS's capabilities to conduct periodic, national pesticide use surveys, the data will not be statistically reliable at the State level. A portion ($600,000) of this initiative is needed to use a sufficiently large sample so that agricultural input data are statistically reliable at the watershed level in the State covered by USDA's Midwest Water Quality Initiative and that data on agricultural chemical use and related practices on major field crops are collected by ERS and NASS with adequate frequency.

Nature of Change. These refinements are required to ensure that the data meet interagency water quality research needs as well as being sufficient to establish agricultural chemical use characteristics. ERS will also provide analytical support for water quality programs consistent with expanded departmentwide efforts. ERS will assess the relative economic advantages of alternative voluntary approaches to increased water quality protection. ERS will also evaluate the economic feasibility of new technologies and practices under development by ARS, CSRS, and the States and support USDA's Geographical Information System development efforts led by SCS and FS by providing pesticide use information by area.

Economic Research Service
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 and Estimated 1990 and 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Alabama..........	$ 80,658	--	16,000	--	16,000	--
Arkansas.........	46,439	1	35,000	1	--	--
California.......	85,705	--	30,000	--	30,000	--
Colorado.........	97,500	1	38,000	--	38,000	--
Connecticut......	16,629	--	--	--	--	--
District of Columbia........	47,937,264	771	50,132,000	838	55,740,000	824
Florida..........	51,869	--	--	--	--	--
Georgia..........	36,000	--	--	--	--	--
Illinois.........	128,998	--	--	--	--	--
Indiana..........	110,904	1	93,000	--	93,000	--
Iowa.............	83,577	--	32,000	--	32,000	--
Kentucky.........	--	--	40,000	--	40,000	--
Louisiana........	15,096	--	--	--	--	--
Maine	15,000	--	--	--	--	--
Maryland.........	20,500	--	45,000	--	45,000	--
Michigan	25,000	--	--	--	--	--
Minnesota........	82,325	--	22,000	--	22,000	--
Missouri	47,500	--	10,000	--	10,000	--
Montana..........	39,754	--	8,000	--	8,000	--
Nebraska.........	9,515	--	--	--	--	--
New Mexico.......	39,900	--	--	--	--	--
New York.........	90,383	--	46,000	--	46,000	--
North Carolina...	49,941	--	39,000	--	39,000	--
Ohio.............	56,519	1	13,000	--	13,000	--
Oklahoma.........	58,500	--	8,000	--	8,000	--
Oregon...........	28,000	--	--	--	--	--
Pennsylvania.....	20,000	--	--	--	--	--
Tennessee........	13,000	--	13,000	--	13,000	--
Texas............	20,500	--	12,000	--	12,000	--
Virginia.........	30,000	--	--	--	--	--
Washington.......	43,500	--	57,000	--	57,000	--
Total, Available or Estimate...	49,380,476	775	50,689,000	839	56,262,000	824

ECONOMIC RESEARCH SERVICE

STATUS OF PROGRAM

The Economic Research Service (ERS) performs work under one appropriation item--economic analysis and research. Current activities and selected examples of recent progress are described briefly below.

ECONOMIC ANALYSIS AND RESEARCH

Current Activities: ERS carrys out its economic analysis and research in program divisions, whose programs and plans for FY 1990 are highlighted below.

1. The Commodity Economics Division (CED) carries out a program of analysis designed to improve public and private sector understanding of U.S. and world markets for agricultural products. This entails activities in three major areas including: commodity supply, demand, and price monitoring and forecasting; analysis of the structure, conduct, and performance of the major national and international commodity markets; and analysis of national and international commodity marketing--from the U.S. producer to domestic and foreign consumers and from the foreign producer of imported products to the U.S. consumer.

   In 1990, CED plans to analyze commodity developments and disseminate results through regular outlook reports, special reports as market developments warrant, yearbooks, presentations, and responses to public information requests; conduct research on the structure, operation, and performance of the major commodity markets in alternative policy settings and research on investment and competition in domestic and foreign food marketing industries; respond to requests for special studies and staff analyses including congressionally mandated studies of commodity policy and program issues; and develop and maintain data bases and models to improve analyses, forecasts, and projections.

2. The Agriculture and Trade Analysis Division (ATAD) is a major source of expertise, data, models, and research information about agricultural economies and policies of foreign countries, agricultural trade and development relationships between foreign countries and the United States, and U.S. agricultural policies. The topics covered by ATAD include agricultural and trade policies and their relationship to the economic, technical, and political factors affecting agricultural trade among countries; economic and agricultural market structure, efficiency, and production systems of foreign countries; technical production systems of foreign countries; and foreign governments' production, consumption, monetary, and trade policies.

   In 1990, ATAD plans to evaluate U.S. agricultural policies, including issues related to the 1990 farm bill; analyze government support for agriculture in key foreign countries; assess options for agricultural policy reform in the United States and other countries as related to ongoing GATT negotiations; examine the implications of a more integrated European Community (EC 1992) on U.S. and world agricultural markets; examine the linkages between livestock and feed subsectors and derived import demand for feed; assess the interaction of various countries' basic resource endowments and government polices in influencing structural change, resource use, and levels of output; and assess the effects of Third World debt and various macroeconomic policies on the demand for U.S. agricultural exports.

3. The Resources and Technology Division (RTD) provides economic analyses of agricultural resource and technology issues at both national and regional levels. Information is developed through integrated research, staff analysis, and situation and outlook reporting activities that focus on: the environmental impacts of agriculture, their economic costs to society, and the costs to agriculture of policies and programs to control them; the availability, use, and cost of agricultural resources as affected by domestic and international policies, programs, and macroeconomic variables; the impacts of these factors on the use and value of land and other agricultural resources and the possible impacts of proposed or anticipated policy and program changes; agricultural production processes' environmental impacts beyond the confines of the farm, especially on water quality; supply, demand, and price relationships, substitutability, and productivity of resources, including capital equipment, fertilizer, pesticides, and energy, as well as the natural resources, such as land and water; and the adoption and transfer of new technologies, the economic impacts of regulating agricultural practices and inputs, and the tradeoffs associated with lower input agricultural systems.

   In 1990, RTD will focus on a number of issues including new legislative proposals designed to achieve a broad range of agricultural, trade, environmental, and sustainability goals as well as eliminate inconsistencies in current policies and programs; potential policies and programs for their impacts on resource use, costs and productivity, environmental quality, and technology adoption; and alternative schemes for protecting surface and ground water quality from agricultural chemicals. RTD will reestablish the pesticide use data base and use existing data on pesticide and fertilizer use, soil characteristics, and tillage practices to analyze the costs of measures to reduce or eliminate potential problems; assess the impacts of global climate change and new technologies; assess economic impacts and policy tradeoffs, identifying policy issues, exploring regulatory and safety issues, and analyzing economic risk; continue to publish the latest information on land use and values, water availability and use, soil conservation activities and program participation, and supply, demand, and prices of manufactured inputs, including fertilizer, pesticides, energy, and farm machinery in situation and outlook reports; and continue analyses of the resource and technology implications of low-input or sustainable agriculture, the impacts of regulatory actions on agricultural chemical use, competing demands for water and assessment of alternative allocation methods for meeting those demands, and possible effects of domestic and international resource and environmental programs on international comparative advantage and resulting agricultural trade flows for both inputs and outputs.

4. The Agriculture and Rural Economy Division (ARED) conducts a program of research to increase understanding of national and regional trends in agriculture and rural areas. ARED collects and analyzes information on economic conditions, identifies economic problems, and supplies information to help assess options for rural and agricultural programs and policies. ARED's agenda is shaped by changes in the economic and demographic structure of agriculture and rural America. Its program covers the industrial transformation of the rural economy; interactions of agriculture and the rural economy with the Nation's economy as a whole; differences in economic performance of urban and rural areas; the performance of the farm sector and its components; the effects

of increasing international economic and financial integration; migration and population change; rural and agricultural labor markets and labor conditions; and the implications of the changing organizational structures of farming, credit, and finance.

In 1990, in keeping with the USDA's Rural Revitalization Initiative, ARED plans to evaluate several of the major strategies and programs frequently proposed to stimulate rural economic development, examining education, business assistance, financial market interventions, and infrastructure strategies. ARED will also undertake an indepth history of USDA rural development policy; study the effects on rural areas of financial market deregulation; describe and analyze trends in economic sectors where rural people may be employed, the skill demands of jobs in expanding sectors, and trends in the skill profiles of rural workers; explore the rural consequences of the Family Support (workfare) Act; and survey and describe State farm credit programs as required by the U.S. Canada Free Trade Agreement. Updating and expanding the knowledge of farm sector structure and differential costs of production of major commodities will provide a wider information base for the design of the 1990 farm bill and the debate that will accompany its consideration. A history of agricultural trade and trade relations between the United States and the European Community will also be undertaken.

Selected Examples of Recent Progress: Recent accomplishments under this appropriation item are highlighted below, by program division.

Commodity Economics Division:

1. Impacts of trade liberalization.

As part of ERS's cross divisional research on trade liberalization (also see under Agriculture and Trade Analysis Division and Agriculture and Rural Economy Division, below), ERS analysts began a series of global commodity market studies. The commodities under study include: wheat, rice, feed grains, poultry and eggs, pork, beef, oilseeds, dairy, cotton, tobacco, sugar, and fresh fruits and vegetables, wine, and tropical beverages. Currently in various stages of completion, the analyses are being published in a series of commodity-specific staff reports. Each report will provide a qualitative review of: supply and demand factors for the commodity; policies affecting world trade in the commodity; the importance of world trade in the commodity; and the potential impact of trade liberalization on world trade patterns for the commodity, with emphasis on the United States. In FY 1989, articles covering trade liberalization in wheat, rice, feed grains, cotton, and tobacco have been published.

2. Crop insurance program options.

At the request of OMB and FCIC, ERS economists are assessing Federal crop insurance program options. Analysis under this activity is appearing in a variety of forms, including a July 1989 report to OMB, staff analysis for FCIC and OMB, and a January 1990 study for public distribution. The July 1989 study addressed how the current crop insurance program functions as a risk management tool and evaluated the role of multiple-peril crop insurance offered through the Federal

Crop Insurance Corporation compared with other programs to assist the agricultural sector, such as price and income supports and disaster assistance. The study also assessed the impacts of alternative vehicles for providing disaster relief on market prices, commodity program participation, and U.S. Treasury costs. The alternatives to the current crop insurance program include a free crop insurance program, a disaster assistance program, a compulsory crop insurance program, and a target revenue program. For all but the target revenue program, program costs for corn, wheat, soybeans, and Upland cotton would be highest under a disaster assistance program. Estimated program costs for this program would average $9.7 billion, 5 percent more than under the current program. Average Government outlays under a free crop insurance program would exceed current program costs by more than 4 percent ($375 million), but fallslightly below the costs of a disaster assistance program. While disaster payments under a disaster assistance program exceed indemnity payments under a free crop insurance program, greater program participation under a free crop insurance program would cause deficiency payments and loan outlays to increase. A compulsory crop insurance program would be less costly to operate than the current program; however, a compulsory program would not be popular with some producers since it would likely be viewed as an additional cost to participate in commodity programs. Extensive staff analyses have so been done for OMB, FCIC, and the Office of the Secretary; assignments will continue through farm bill deliberations. A more comprehensive study will be published in January 1990 and ERS staff will participate in a joint university USDA report and conference in May 1990.

3. Background information for 1990 farm legislation.

In 1990, the U.S. Congress will consider new farm legislation to replace the expiring Food Security Act of 1985. Recognizing the need for more public information in this area, ERS analysts have prepared a series of background papers to support farm legislation discussions. Individual reports are being published for aquaculture, barley, beef, corn, cotton, dairy, fruits and vegetables, honey, oats, peanuts, pork, poultry, rice, sorghum, soybeans, sugar, tobacco, wheat, and wool and mohair. These reports summarize, in a nontechnical form, the experience with various farm programs and the key characteristics of the commodities and the farm industries that produce them. ERS analysts are also serving on USDA farm bill task forces to develop options for legislation. Task forces have been established for wheat, feed grains, cotton, rice, soybeans, dairy, other livestock, sugar, peanuts, tobacco, honey, wool and mohair, grain reserves, acreage loses, and disaster assistance. The task forces began meeting in July 1989.

4. Changes in the food marketing system.

ERS economists completed the fourth annual Food Marketing Review, which monitors developments in the size, structure, conduct, and performance of the U.S.'s 500,000 food marketing firms. The study found that the value of mergers in the U.S. food marketing system in 1988 reached the highest level in U.S. history. The four largest mergers announced or completed were valued at $47 billion, compared with the previous high of $26 billion in 1985 for all recorded transactions. Sales in the food marketing system reached $638 billion. Advertising expenditures rose to an estimated $11.5

billion. Over 10,000 new grocery products were introduced. Food processors spent $8.5 billion on new plants and equipment, including 369 new plant projects. The balance-of-trade deficit in the U.S. processed food sector declined from $5.6 billion to $3.3 billion, partly helped by the fallen value of the dollar. U.S. food marketing firms invested $16 billion in foreign operations in 1987, including $12.6 billion in food processing, $1.4 billion in food wholesaling, and $2 billion in retailing and food service. A composite of U.S. processing companies showed that 20 percent of all sales are from foreign operations. U.S. food franchise firms had 7,000 establishments abroad. Foreign firms invested $22.5 billion in the U.S. food marketing system, including $16 billion in processing, $2.6 billion in wholesaling, and $3.9 billion in retailing and food service.

5. Characteristics of burley tobacco farms.

ERS economists completed a study of burley tobacco farms in Kentucky and Tennessee. The study, based on a survey of 273 burley producers conducted in the spring of 1985, provided information for the 1984 crop year. The findings indicate that the typical burley enterprise is small, averaging 2.3 acres of tobacco in 1984 on an average of 122 acres of farmland operated. Burley tobacco is a labor-intensive crop requiring about 240 hours of family and hired labor per acre or 13 hours per 100 pounds in 1984. An additional 11 hours of custom labor were also used per acre. Almost two-thirds of the labor used on the burley tobacco farms surveyed was family members or exchange labor. Harvesting required 33 percent of the total labor needs, and preparing the tobacco for market required 38 percent, excluding custom costs. Most burley tobacco farms relied on nonfarm sources to supplement their income. The net worth of burley tobacco producers averaged $130,715 in 1984, substantially below the $322,732 for all U.S. farm producers. The average farm debt for burley farms was about a third less than for all U.S. farm producers.

Agriculture and Trade Analysis Division:

1. Foreign markets and prospects.

One ERS ongoing program objective is to improve the public's understanding of the underlying technical and economic factors that influence the supply and demand for agricultural products in foreign countries and regions. Several ERS reports have highlighted the potential growth in foreign market demand for agricultural commodities and value-added products. Trends in food preparation and consumption are changing rapidly in areas such as the Pacific Rim, the reform-minded centrally planned economies, and several high-income developing countries. Studies by ERS economists have identified many of these emerging trends and patterns. In Japan, for example, diets are becoming westernized. Thailand has increased its rice and poultry meat imports as income growth continues. The Thai income growth is expected to lead to increased demand for livestock products and result in a reduction of feed grain exports as more feed grain is diverted to the domestic market. Thailand will also need to increase oilseed or oilseed meal imports.

2. Macroeconomic factors and Third World debt.

Developing countries, as a group, have been identified as a crucial element to the long-term growth of U.S. farm exports. ERS research on international macroeconomic issues, such as Third World debt, provided yet another perspective on the developing economies/farm export linkages. Several reports focused attention on the long-term implications of Third World debt on farm exports. Earlier work on the debt issue focused on the debt-affected country's ability to pay for farm products from the United States. Various export enhancement and credit programs were offered in an attempt to offset the short-term ability-to-pay constraint. The persistence of the debt problem, however, has led to slower growth in many of the debt-affected countries. This slower growth results from a fall in investment during this prolonged period of heavy debt repayment. Slower growth could translate into diminished demand for U.S. farm products.

3. Competition and competitiveness in the global marketplace.

ERS researchers found that economic and policy factors affect the competitiveness of a country's agriculture. One recent ERS study found that real economic variables, such as relative efficiencies and relative factor endowments, dominated export behavior. Government intervention to artificially support domestic prices was found to be a costly way to promoto a country's exports. Government policies and programs, particularly monetary policies, were found to be a more dominant factor influencing import behavior. These study results add further evidence that attempting to forestall market forces is not only costly, but inefficient. One recent ERS study calculated that for industrialized countries as a whole, every dollar transferred to agricultural producers requires almost $1.40 from consumers and taxpayers. In other words, for every dollar given up by consumers and taxpayers, only 72 cents actually reaches producers--the rest is an efficiency loss to the economy.

4. Impacts of trade liberalization.

ERS continued its research and analysis of the impacts of countries' policies on world markets and on the impacts of global trade liberalization on agriculture. The calculation of producer and consumer subsidy equivalents (measures of government support levels) for various agricultural commodities was extended to cover 28 countries and about 30 commodities for 1982-87. Research showed that important added benefits can be gained by reforming the policy/trade environment in addition to slashing the cost of current policies. Government interventions in agriculture have led to inefficiencies in resource use, which, when corrected, could increase overall economic growth. ERS simulations of trade liberalization imply an overall benefit of $36 billion. The European Community is the largest beneficiary, with more than $12 billion in benefits. The United States and Japan also realize substantial benefits of $10 billion and $9 billion, respectively. An ERS study of U.S.-Canada free trade showed that removal of border measures would have little effect on either country's agriculture, but changes in domestic agricultural policies would have a much greater effect.

5. U.S. agricultural policies and policy options.

ERS economists evaluated the consequences of various agricultural policies to the agricultural sector. The 1988 and 1989 droughts significantly reduced the supplies of available food and feed grains, soybeans, and cotton. These droughts were closely monitored by ERS analysts, and the consequences of legislation enacted was reviewed for its impact on the agricultural sector. Disaster assistance did not replace direct payments on a dollar-for-dollar basis, and the distribution of disaster payments received included livestock, fruit, and vegetable producers, as well as producers of program crops. ERS economists also analyzed the distribution of direct program payments. They found agricultural production occurring on a diverse set of farms with greatly differing input, output, cost, and income relationships. Positive net income was concentrated in the top 60,000 farms. Direct income support to producers of program commodities was concentrated on about one-third of the farms. Approximately one-half of the payments went to about 127,000 farms that earned more than $40,000 per farm when direct payments were included in income. Analysis of various forces that might shape the 1990 farm bill showed that imposing a budget constraint on farm bill expenditures would reduce income support for producers of commodities who receive support through Government payments but would have little impact on producers of commodities who receive their support through tariff protection and supported domestic prices. Another ERS study analyzed the implications for U.S. agriculture of unilateral policy reform. If traditional commodity programs are eliminated, initially acreage idled by acreage reduction programs returns to production, commodity prices drop, farm income drops, and exports and domestic demand increase. Commodity prices decline for a number of reasons, including additional production and the release of Government-controlled stocks on the market. Acreage returns initially but declines over time to levels higher than the 1986 level but lower than the 1981 peak. After the sector adjusts, prices increase and farm income rises. Those regions of the country most dependent on direct payments adjust the most; i.e., the Cornbelt, Southern, and Northern Plains States. Also, per-unit use of manufactured inputs would be expected to decline as land extensification occurs.

Resources and Technology Division:

1. Agricultural impacts of restricted pesticide use.

Growing public concerns about the adverse effects of pesticide use on food safety, water quality, worker safety, and endangered species are creating demands to reduce pesticide use in the production of food and fiber in U.S. agriculture. ERS economists are charged with evaluating the economic impacts of reduced pesticide use. Their evaluations generally show that per-unit production costs increase as a result of using more expensive alternatives, losses increase because alternatives are less effective, and lower production raises consumer prices. A pesticide ban will cause a greater impact for producers and producing regions that rely on chemical use to control heavy pest infestations. Also, when effective alternative pesticides are available, banning one of them usually would have little effect, but later banning of one or more of the remaining alternatives would significantly escalate economic impacts, especially for consumers. The magnitude of these impacts will vary depending on the effectiveness of alternatives and the scope of a regulatory action. For example, ERS estimated the cost of banning use on 48 crops of the insecticide ethyl parathion, for which effective alternatives apparently exist, to be $84 million. The estimated cost of banning the use of a single soil fumigant, methyl bromide, was about $400 million. However, if all soil fumigants used on citrus, potatoes, tobacco, and fresh market tomatoes were banned, the impact would increase to $3.4 billion. Another feature of pesticide regulation that is becoming more frequent is State-imposed restrictions. Proposition 65 in California is an example, and analyses showed that producers in California could lose market shares relative to producers in other States and countries.

2. Development and impacts of new technologies.

Technology research in ERS focused on both assessment of the technology research and development process and estimation of the impacts of new technologies. ERS researchers assessed the issues of research and development management and the role of public versus private research by looking at the development and subsequent diffusion of hybrids and semidwarf wheat varieties. They found that private companies developed hybrids because they contained a built-in trade secret; i.e., hybrid seed is not easily reproduced, and seed saved from farmers' crops is not as productive as the parent seed. Public research was aimed at the semidwarf varieties that, until around 1983, were more productive than hybrids, but were also easy to reproduce and thus offered no trade secret protection. Following passage of the Plant Variety Protection Act in 1970, many private firms shifted their wheat breeding research dollars to the higher yielding semidwarf varieties and applied for protection under the new law. These specific examples speak to the broader issue of public versus private expenditures for the development of other types of new technologies. Research continued on the likely effects of recombinant DNA-derived animal growth hormones on the dairy and hog industries. This research suggests that earlier research predicting large changes as a result of this technology could have overstated the effects. Changes already under way will continue (e.g., larger farms and more vertical integration in the hog sector) and changes will be only marginally affected by the introduction of growth hormone technology.

3. Effects of global climate change.

ERS research on global climate change focused on providing a U.S. contribution to the international Intergovernmental Panel on Climate Change regarding the effects of climate change on agricultural production in the United States and on world agricultural prices and trade patterns. A significant degree of current consensus exists among scientists that agriculture in middle latitude areas, including the United States and Western Europe, may suffer from a warmer and dryer climate, while agricultural areas in Canada, the U.S.S.R., China, and Australia may benefit from longer growing seasons and, in some cases, greater precipitation. Such changes would shift comparative advantage in agricultural trade away from the United States and Europe. The net global effects on the world food supply are likely to be small, since reduced production potential in some areas is balanced by gains in other areas. While these results run counter to the concern that climate change could pose a major problem for world food availability, they do confirm the view that significant shifts in regional comparative advantage are possible. ERS economists also worked with the National Climate Program Office to organize a workshop on the effects of climate change on agriculture, forestry, water resources, and coastal infrastructure. The workshop developed approximate response functions of climate effects and further refined an approach for assessing the costs and benefits of actions to limit emissions of gases that contribute to climate change. ERS has also contributed to USDA's Global Change Research Plan by taking the lead in developing plans for research on human interactions and response strategies.

4. Crop production with Federal irrigation water.

Crop production with irrigation water delivered by the Bureau of Reclamation raises fiscal and equity concerns. The fiscal concern involves the use of such water to produce Federally-subsidized program crops. ERS economists conducted research measuring the levels of Federal crop subsidy and water subsidy received by producers who use Federal irrigation water. Between 1980 and 1986, estimated annual program crop subsidies received by this class of producers ranged from $0 to $500 million. This amounted to less than 5 percent of national program crop payments. The subsidies included deficiency payments, nonrecourse loan subsidies, land diversion payments, and marketing loan subsidies. The level in any single year depended on several factors, including commodity market prices, target prices, loan rates, and commodity program participation rates. Estimated Federal water subsidies for program crop production was $85 million in 1986. The estimated double subsidy (the total subsidy received by producers participating in both Federal programs) was $445 million in 1986. The equity concern involves the subsidy of an input, namely, surface water for irrigation, for only a small percentage of agricultural producers. This promotes a perception that, without production from lands that receive Federal irrigation water, market prices and profits to other producers would increase. The perception may be true for production of specialty crops. Producers who receive Federal irrigation water control relatively large shares of national production of specialty crops, including over 40 percent of vegetable acreage, over 33 percent of nut acreage, and over 25 percent of fruit acreage. However, the perception is false for program crop production. In terms of national production, these producers grow only 2 percent of feed grains, 3 percent of wheat, 11 percent of rice, and 14 percent of cotton.

5. U.S. commodity programs and agricultural resource use.

In order to get a sense of the effects of commodity programs on U.S. agriculture, ERS researchers assessed what the farm sector would look like in the absence of farm programs. Without price supports for program crops, long-run production of those crops would be lower, and market prices would be higher. More land would be in production, but the incentive to produce program crops would be reduced because support prices would be eliminated. Shifts in production among program and nonprogram crops and substitution between land and nonland inputs would also influence prices and outputs. Farmers would adjust to nonsupported commodity prices and increased land availability by reducing the use of nonland inputs, changing production patterns, and reducing overall production. This land extensification would, at least partially, reverse the historical trend toward more intensive use of chemicals and machinery. Falling land values lead to the substitution of land for chemicals, capital, and labor. Eliminating commodity programs would reduce the effectiveness of environmental provisions that have been tied to program benefits, such as the conservation compliance, swampbuster, and sodbuster provisions. But because land will be used less intensively in the absence of farm programs, environmental problems associated with surface and ground water contamination also could be lower. On the other hand, in the absence of commodity programs, more land is used to produce less output. This increase in total acreage could contribute to increased levels of soil erosion, especially if highly erodible lands are brought back into production. Soil erosion could decline if production shifts to less erosive regions, crop rotations are encouraged, and conservation tillage methods are used.

6. Potential effectiveness of wetland preservation policy.

ERS researchers studied the swampbuster provision of the Food Security Act of 1985, which was intended to slow the conversion of agricultural lands. The effectiveness of the provision, however, is conditioned on three elements—the presence of wetlands within a farming operation, economic and physical feasibility of conversion, and farm operator dependence on farm program benefits for a substantial portion of farm income so that sacrifice of benefits represents a real disincentive to conversion. These conditions constrain the potential effectiveness of the swampbuster provision. For example, of the 78.4 million acres of non-Federal, rural wetlands remaining in 1982, only about 17 million acres or 22 percent have physical potential for conversion. Considering the economic dependency of farm operators on government payments, which varies according to the type and amount of crops grown, the likely swampbuster provision effectiveness is reduced to about 6 million acres. Other policy options include creation of wetland reserves or wetland restoration programs. Several programs currently purchase permanent easements on agricultural wetlands, primarily in the Prairie Pothole region. Wetland restoration programs may be relatively expensive, since hydric cropland is relatively productive. The cost of a program to restore 2.5 million acres of hydric cropland, for example, is estimated to be $845 million, two-thirds of which would be for easements and one-third for restoration expenses.

7. The Conservation Reserve Program.

ERS economists continue to monitor the progress and economic effects of the Conservation Reserve Program (CRP) as enrollment increases. In an updated analysis of the CRP, ERS economists designed an evaluation framework to characterize the effects of the program on net national income and on government expenditures. Results of the analysis indicated that partial net economic benefits of the CRP will range from $3.4 billion to $11.0 billion. Net Government cost for the program was estimated at $2.0 billion to $6.6 billion, but this estimate is highly sensitive to assumptions concerning acreage reduction program levels. The CRP is expected to have important impacts on the quality of natural resources, including surface and ground water, air, wildlife, and soil. ERS analysts assessed the impacts of enrolling cropland in the CRP, including reduced wind and water erosion, chemical use, and ground water use and improved wildlife habitat, on these natural resources. The results of these studies showed that if the CRP achieved its goal of 45 million acres of cropland enrolled, resource benefits would range from $6 billion to $14 billion. The Lake States and the Corn Belt received the highest benefits. The largest per-acre benefits were found in the Northeast and in the Lake States. The resources benefiting the most from the CRP were wildlife, at $3.8 billion, and water quality, at $3.6 billion. ERS economists have also investigated the effects of allowing drought emergency haying and grazing of CRP grassland, the potential for expanding the CRP to achieve greater water quality improvements, and options for retaining CRP land in environmentally beneficial uses when CRP contracts expire.

8. Potential for increased use of crop rotations.

ERS resource economists have addressed the concern that the most intensively farmed land in the United States is being continuously cropped with one crop, which causes long-term decreases in soil productivity and increases the need for agrichemical use. They found, however, that among major crops, continuous cropping is not a prevalent practice. With the exception of land planted with cotton in Arkansas, Louisiana, Texas, and Mississippi, irrigated corn in Nebraska, winter wheat in Oklahoma, soybeans in Mississippi, and rice in California, over 50 percent of most cropland was involved in some type of crop rotation between 1986 and 1988. In the aggregate, only about 26 percent of corn land, 20 percent of winter wheat land, 15 percent of soybean land, 18 percent of rice land, and 57 percent of cotton land grew the same crop continuously for 3 years. Thus, while the opportunity exists to use rotations to maintain soil productivity and reduce the need for certain agrichemicals, the potential impacts may not be as great as some people think.

Agriculture and Rural Economy Division:

1. Impacts of trade barriers.

ERS researchers developed a 30 sector general equilibrium model of the U.S. economy and used it to estimate the effects of trade protection on the U.S. economy. Results showed that lower imports that would result from trade barriers would tend to be accompanied by lower exports. Nearly all sectors of the economy would lose from across-the-board tariffs. Gains from restrictions on imports of the products of a single sector would tend to disappear if protection were extended to many sectors.

2. Improvements in farm household income estimates.

ERS economists developed several improvements in measuring financial aspects of farm operations. New measurement techniques will improve estimates of the distribution of production returns between the nearly 420,000 farm operators who rent land and their 1.2 million landlords. Another change will allow ERS to report commodities and returns from commodities produced under contract more correctly--as belonging to the contractor rather than the farm operator. This approach will reduce income estimates by as much as two-thirds in the case of some types of farms that engage in contract production. More accurate measurement of the number of households that receive income from each farm will reduce estimates of farm income per operator household, especially in the largest sales class where an average of 1.3 households receive income from each farm operation.

3. Farm household income dynamics.

ERS researchers completed an analysis of financial changes taking place in a sample of southwestern Wisconsin farm households interviewed in 1982 and again in 1986. The fraction of financially viable households in the sample, about 60 percent, changed little during that period. But apparent stability concealed largely offsetting changes in about 30 percent of the individual households over the four years. Seventeen percent became viable between 1982 and 1986. They improved their financial condition by increasing their off-farm earnings while maintaining gross farm income and reducing cash expenses and debts. The 13 percent of farm households in the sample that lost their financial viability between 1982 and 1986 had declining gross farm income, about the same off-farm earnings, and increased average debts and cash operating expenses. The ERS study also traced farm operators who left farming between 1982 and 1986, approximately one in five in the sample. About 63 percent left farming for age, health, or occupational mobility reasons. The remaining 37 percent left farming for financial reasons. Family income increased substantially for those who left farming for financial reasons, and two-thirds stayed in the community.

4. Effects of recent farm and farm credit legislation.

The Food Security Act of 1985 and the Agricultural Credit Act of 1987 legislated significant changes in the way farm credit is delivered. ERS analysts have completed a series of analyses examining the effects these changes have had (or are expected to have) on the farm sector. Following the 1985 Act, FmHA shifted its farm lending activities from direct to guarantee programs. Analysis of guaranteed loan programs suggests that interest rates are similar to those charged by participating lenders on their unguaranteed farm loans. Preliminary research suggests, contrary to popular belief, that FmHA's farm loan guarantee programs had an expansionary effect on farm lending among participating commercial banks. The 1987 Act restructured the Farm Credit System (FCS) and created the Federal Agricultural Mortgage Corporation (Farmer Mac), charging it with developing a secondary market in farm real estate mortgages. ERS research indicates that the FCS improved its financial position following the 1987 Act, but that it still faces a long road to complete recovery, with much of the cost of consolidating institutions, bailing out failed institutions, and restructuring loans still ahead. While Farmer Mac is not yet operational, preliminary ERS research suggests that its size and impact on agricultural lending will be fairly limited for the next several years.

5. The future of the service sector in rural economies.

ERS researchers are developing a clearer picture of rural employment in services, the source of all net employment growth nationally during the 1980's. ERS research shows that most rural job growth is also in services, but chiefly in tourism and consumer services--sectors with comparatively low-paying jobs. An important question is whether rural areas can capitalize on tourism in more sophisticated ways that will lead to better-paying jobs. Another is the potential for growth in rural areas in the higher-paying producer service sector. Until recently, urban areas have captured a disproportionate share of employment growth in producer services. These services are necessary to support other sectors, including manufacturing and tourism, that bring income into rural communities from the outside.

6. Rural-urban cost-of-living differences.

The significance of the large gap between average incomes in rural and urban areas depends on differences in costs of living. But no measures of actual cost-of-living differences are available. A 1981 survey in Wisconsin asked households how much income they would need to make ends meet. ERS researchers used these minimum income needs to explore rural-urban differences in the cost of living. Wisconsin's nonmetro households reported average minimum income needs of $837 per month, compared with $931 in metro areas. About half of the difference came from factors other than the cost of living: nonmetro households had lower expectations (as lower income people generally do) and thus reported lower minimum needs; and more nonmetro households had paid off their mortgages. Differences in the average size of households and the gender and age of household heads also affected needs. Cost-of-living differences account for some of the remaining difference in minimum needs, but differences in personal preference may also play a role. Metro households may feel a need for more income and what it buys, while nonmetro households may accept lower incomes in exchange for fulfilling a need for other amenities like access to outdoor recreation.

MONDAY, FEBRUARY 26, 1990.

NATIONAL AGRICULTURAL STATISTICS SERVICE

WITNESSES

BRUCE GARDNER, ASSISTANT SECRETARY FOR ECONOMICS

CHARLES E. CAUDILL, ADMINISTRATOR, NATIONAL AGRICULTURAL STATISTICS SERVICE

DONALD M. BAY, DEPUTY ADMINISTRATOR FOR OPERATIONS, NATIONAL AGRICULTURAL STATISTICS SERVICE

RICHARD D. ALLEN, DEPUTY ADMINISTRATOR FOR PROGRAMS AND CHAIRPERSON OF THE AGRICULTURAL STATISTICS BOARD, NATIONAL AGRICULTURAL STATISTICS SERVICE

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

Mr. WHITTEN. We now turn to the National Agricultural Statistics Service.

Mr. GARDNER. Mr. Caudill.

STATEMENT SUMMARY

Mr. CAUDILL. Thank you, Mr. Chairman.

I appreciate the opportunity to discuss the fiscal year 1991 budget request for the National Agricultural Statistics Service with this committee. You will recall that under your leadership, support from this committee has been critical to the modernization of the U.S. agricultural statistics program, which started back in the early fifties.

I will submit my complete statement for the record and summarize what we are requesting in the way of a budget increase and what we will do with that increase, if you and the Congress approve it.

We recognize that both private and public sector data users support the need to maintain quality in all statistical reports. On the other hand, not one of them has been willing to give up quantity to improve quality. Although we have tried to adjust our program to maintain optimum levels of both, it has become increasingly difficult to maintain quantity and quality, and indeed both have suffered during the recent past.

BUDGET REQUEST

Our fiscal year 1991 budget request is for $81.2 million. It seriously addresses the problem of declining quantity and quality of U.S. agricultural statistics and would enable NASS to fill some of the critical gaps in existing data and information on agricultural chemical uses as they impact on food safety and water quality.

Of the total budget increase, about one-half of that will be used to shore up existing programs and support activities. An increase of $1,850,000 will be used to improve the existing data on farm labor and agricultural wage rates.

Inadequacies in these data series have become increasingly apparent in recent years as they are used to implement adverse effect wage rates and other programs affecting the demand for and the supply of agricultural labor.

Our current quarterly survey does not provide State level estimates, and does not cover peak labor uses in many States. The proposed budget increase would enable NASS to produce monthly estimates for the three top agricultural labor States, California, Texas and Florida.

For the next seven States where demand for agricultural labor is large, monthly surveys would be conducted for eight months, January and April through October. These seven States are North Carolina, Pennsylvania, New York, Michigan, Wisconsin, Washington and Oregon.

The present quarterly program would remain in effect in the remaining States. These changes would largely eliminate the inequities in our present program.

An increase of $2.4 million is requested to improve coverage of the list sampling frame maintained by NASS. This list, which is critical to all present statistical programs, as well as the proposed survey programs for the Department's food safety initiative, does not presently meet statistical standards for coverage or duplication, both sources of serious non-sampling errors in the data that we produce. The increase in staff associated with the proposed budget increase for list building is absolutely essential for the improvement needed in this area.

We are also asking for an increase of $925,000 to enable us to restore survey coverage in States where sample sizes were reduced or States where entire surveys have been eliminated due to budget restrictions in fiscal year 1990. Also, some methodological research projects would be funded out of this $925,000. These reductions have not directly affected our program coverage for 1990, but they will definitely reduce quality of forecasts and estimates for 1990 and for the future.

The $2.1 million requested to cover salary increases is self-explanatory, but is critical if we are to maintain our current statistics. Absorption of more than $14 million in inflationary costs over the past decade has pushed NASS to the point where we are no longer able to cover all cost increases without seriously eroding program content and/or quality.

Last, but certainly not least, is a request for $7 million to collect data that are urgently needed for the Department's food safety and water quality initiatives. In the January 1990 issue of the American Vegetable Grower Magazine, I read a commentary which states, "Despite widespread media coverage, surprisingly little information is available on the actual use of agricultural chemicals. Many Americans and public policy-making officials assume that there exists somewhere up-to-date detailed data about the quantity of specific pesticides being sprayed on individual fruit and vegetable crops. They are seriously mistaken."

A major step in eliminating this deficiency will be possible if NASS receives the requested budget increase, which incidentally is key to food safety and water quality activities of other USDA agencies, such as the Economic Research Service and the Agricultural Marketing Service.

Mr. Chairman, that concludes my remarks. I will be happy to try to answer any questions you or the committee might have.

[CLERK'S NOTE.—The biographical sketch of Mr. Bay appears on page 87. Mr. Caudill's statement appears on pages 88 through 95. The explanatory notes appear on pages 96 through 112.

AGRICULTURAL LABOR DATA

Mr. WHITTEN. You have requested an increase of $1,850,000 for Agricultural Labor Data. Please describe how you intend to conduct these surveys, the total cost, and expected completion dates.

Mr. CAUDILL. The additional funding will permit increasing the frequency and sample size for the current quarterly Agricultural Labor Survey program which will bring the total cost to about $4.3 million annually. This will allow expanding the publication of hired worker wage rates from 3 States and 15 regions to 10 States and 10 regions. A more frequent survey will provide better coverage of peak labor periods and seasonal work activities. California, Florida, and Texas will conduct monthly surveys; the other major labor States will collect data in January and monthly in April through October. This will be a continuing program and does not have a targeted completion date.

Mr. WHITTEN. From where is the urgent demand for more hired agricultural labor and wage rate data of greater reliability coming?

Mr. CAUDILL. Data demands have increased from agricultural employers, worker representative groups, analysts, State governments, and policymakers for more frequent and more reliable State level agricultural labor statistics. The 1986 Immigration Reform and Control Act increased the demand for statistics to cover seasonal work activities and peak labor periods. Recent changes in minimum wage rate legislation increased requests for agricultural wage rate data. Also, an October 1988 General Accounting Office report, The H-2A Program: Protections for U.S. Farmworkers, states that the sample sizes for field and livestock workers in some regions are probably too small for the purpose of identifying their wage trends. Numerous requests have also been received from Members of Congress on behalf of their constituents. The NASS data are used directly in administering the H-2A program. Additional State data will better represent the agricultural activity for use in establishing H-2A wage rates.

Mr. WHITTEN. Please describe in some detail the work you now have underway in this area.

Mr. CAUDILL. The Agricultural Labor Survey provides estimates of total number of persons doing farm work during the survey week of the 12th of the month. Wage rates and average hours worked data are also estimated. The probability survey is conducted in January, April, July, and October in all States except Alaska. Survey data are collected from agricultural services and farm establishments by method of pay and type of work performed. Information is also obtained to estimate demand for seasonal agricultural services as required by the Immigration Reform and Control

Act. Number of farm laborers and wage rates are published quarterly in the Farm Labor report for 18 geographical regions.

SAMPLING FRAME FOR AGRICULTURE

Mr. **Whitten**. You have requested an increase of $2,400,000 for Improved Sampling Frame for Agriculture. Please describe in some detail how this comprehensive list frame coverage will be accomplished. How does this differ from what is currently being done in this area?

Mr. **Caudill**. These funds will be applied toward improving coverage of the NASS sampling frame in three areas. First, we will acquire some existing nationwide lists to supplement the existing frame. Some of the sources we will contact are the Forest Service, Bureau of Land Management, Agricultural Marketing Service, Extension Service, Agricultural Stabilization and Conservation Service, Animal and Plant Health Inspection Service, Federal Crop Insurance Corporation, and Soil Conservation Service. Each of these sources contains only a portion of the target population which NASS seeks to obtain, so it is important that we consider each in our improvement efforts.

The second area will involve increased activity to pursue and identify additional operators at a local level. A 30 percent increase in activity would be expected by field enumerators to seek out new operations. This increase involves assigning enumerators to find new farms and ranches and obtain classification information for them.

Lastly, increased funding will be used in maintenance activities of the expanded frame. Experience shows that 30 to 50 percent of a sampling frame changes in some way during each year. This is largely a clerical function, and an increase in staff resources in each of the 45 State Statistical Offices would provide the ability to keep up with the ever changing frame. Additional processing, training, and support will also be required.

Mr. **Whitten**. Do you have the data base capability to be the lead agency for development and maintenance of a central farm list for all Federal statistical programs?

Mr. **Caudill**. We currently have the capability to take on this role. We also have the necessary experience with list maintenance and the proposed initiative will permit expansion of our current capabilities.

Mr. **Whitten**. What other agencies within the Department also keep this type of information?

Mr. **Caudill**. ASCS maintains files of names and crop acreage associated with farming, but these records are for smaller units than the entire operation. Also, ASCS files contain names for individuals other than the farm operators. APHIS maintains some livestock herd sizes and numbers of animals inspected for herd owners. The Bureau of Land Management and Forest Service maintain lists of grazing land permittees and the number of animal units permitted on grazing lands. The Agricultural Marketing Service keeps lists of primarily fruit and vegetable growers who belong to marketing orders or boards across the country.

Mr. **Whitten**. Please provide an object class breakdown for the $2,400,000 increase.

Mr. **Caudill**. I will provide, for the record, an object class breakdown of the $2,400,000 requested for the Improved Sampling Frame for Agriculture.

[The information follows:]

Object class and description	*Amount*
11—Personnel compensation	$1,112,000
12—Civilian personnel benefits	212,000
21—Travel and transportation of persons	62,000
22—Transportation of things	15,000
23—Communications, util. and misc. changes	169,000
24—Printing and reproduction	24,000
25—Other services (data collection and processing)	672,000
26—Supplies and materials	43,000
31—Equipment	91,000
Total	2,400,000

FOOD SAFETY

Mr. **Whitten**. How does your request for a $7,000,000 increase for improved data for food safety differ from the Economic Research Service request?

Mr. **Caudill**. They are complementary. The survey work will provide data for both NASS and ERS. NASS will be developing an agricultural pesticide use information data base and publishing onfarm pesticide use estimates. ERS will be using the data base to estimate the economic impacts of alternative pesticide policies and practices and would conduct additional research on the economics of food safety. The survey which NASS has designed will collect all the data that ERS and NASS need to fulfill their parts of the Food Safety Initiative.

Mr. **Whitten**. Please describe in some detail your responsibility as part of the Department's $25,000,000 Data Initiative and how you will achieve this responsibility, including total cost and expected completion date.

Mr. **Caudill**. As noted earlier, we are responsible for developing an agricultural pesticide use information data base and publishing on-farm pesticide use estimates. The data collected must also support ERS in its agency data needs as well as water quality programs and other environmental studies.

A survey and estimating program is being designed to collect extensive data on agricultural chemical usage, acreage, production, prices, income, expenditures, cropping and irrigation practices, and soils. Agricultural chemical usage estimates and production data associated with those uses will be available approximately 5 months after data are collected, while income, expenditure, and other economic data will be available each June.

Data collection periods for agricultural chemical data vary by crop. Data will need to be collected in multiple contacts. NASS will begin data collection in the fall of 1990 and continue as needed to build the data base. The total cost for NASS's portion of the initiative is $7.0 million per year. This assumes that ERS will also receive annual funding of $2.5 million for the Water Quality Initiative. A comprehensive data base will be developed by late 1993, although a significant volume of data will be available beginning in early 1991.

Mr. WHITTEN. Why will information be collected on a three-year cycle rather than annually?

Mr. CAUDILL. This is a compromise to reduce both cost and respondent burden while being responsive to the urgent policy needs for the information which will come from this program. A 3-year cycle presents the least burden on the survey respondent. An annual survey requires an enormous sample size and costs could become prohibitive. An alternative design that is being considered would collect pesticide use data for major crops each year and for vegetable and fruit crops on a 2-year rotation cycle. A constant monitoring of changes in the availability of specific pesticides will be utilized to keep the data base on pesticide use as current as possible.

FUNDS FROM OTHER SOURCES

Mr. WHITTEN. Your explanatory notes show a projected increase of over $1,000,000 in fiscal year 1990 over fiscal year 1989 from the Economic Research Service. Please provide an explanation for the increase.

Mr. CAUDILL. The projected increase is due to the need by the Economic Research Service for more extensive survey work on water quality. Pesticide and fertilizer use data on cotton, corn, wheat, soybeans, and 21 vegetable crops are being collected during fiscal year 1990. Detailed economic data will also be collected from a subsample of those reporting pesticide use to provide ERS a farm-level data set. ERS will analyze the profitability and productivity associated with the use of pesticides in crop production.

Mr. WHITTEN. Your explanatory notes also show a projected decrease of $202,900 in fiscal year 1990 from fiscal year 1989 from the Department of Commerce. Please provide an explanation for the decrease.

Mr. CAUDILL. The decrease occurs because the Bureau of Census of the Department of Commerce does not require in the current fiscal year NASS assistance to collect data on horticultural specialties and land ownership. Also the services of NASS employees detailed in FY 1989 to the Bureau of Census for work associated with the 1987 Census of Agriculture are not needed this fiscal year.

ADP EQUIPMENT

Mr. WHITTEN. Last year you requested an increase of $6,000,000 for a major ADP acquisition for field offices. What is the status of this initiative? Why aren't you asking for additional funds this year? Are all your field offices now compatible?

Mr. CAUDILL. The appropriations for fiscal year 1990 totaled $2,000,000 for this initiative. These funds are being used to upgrade ADP equipment in 16 field offices. We have completed this installation in 6 field offices and headquarters and will acquire equipment for 10 additional field offices by September 30. Currently, we are installing the new equipment in five new offices every 3 months. All offices will be compatible when this initiative is completed in January 1992.

Mr. WHITTEN. How many field offices now have the on-line system for maintaining sampling files?

Mr. CAUDILL. We have been bringing States on-line as the necessary technology is installed in the offices. Currently, 18 offices are on-line. Plans are to bring an additional seven States on-line in April 1990.

Mr. WHITTEN. On page 24g-3 of the explanatory notes you state that a contract to procure microcomputers and local area networks for all field offices was awarded. Will this contract fulfill your goal of achieving compatibility between all field offices? What will be the cost of this contract?

Mr. CAUDILL. This contract, awarded in August 1989, will achieve the goal of compatibility between all field offices. As I mentioned earlier, this installation is underway and should be completed in January 1992. The projected cost of the 8-year life of this contract is approximately $17 million.

SATELLITE DATA FOR SURVEYING

Mr. WHITTEN. What were the results of the joint, cofunded research project with the National Aeronautics and Space Administration to construct area sampling frames on computers? What was the cost of this project?

Mr. CAUDILL. The joint, cofunded research project with NASA is currently in the second year of a 3-year life. NASA is responsible for writing the software. Parallel testing of the computer assisted process as compared to the manual paper-based process has been completed for an area in Missouri and is now being done for an area in Michigan. Preliminary time comparisons show a substantial decrease in the time required to divide the same land area into different land use categories using the computer approach versus the manual approach, as much as 50 percent. The Agency cost of the project for FY 1990 is $141,000, over one-half of which will be spent on equipment. The software incorporates the land use division, measurement, and sample selection subprocesses involved in area frame development.

Mr. WHITTEN. How much will you spend in fiscal years 1990 and 1991 on the acquisition of satellite data?

Mr. CAUDILL. In fiscal year 1990, we will spend $30,000 on statellite data acquisition. We plan to spend $240,000 for this in fiscal year 1991. The reason for the increase is that two recent research efforts have advanced to the point of implementation. The first effort is the joint effort with NASA mentioned earlier. By going operational with this, we will reduce the total cost of building an area sampling frame by at least 10 percent. Area sampling frames ensure complete coverage for U.S. agricultural estimates. The second research effort is the use of digital Landsat data to vastly improve, by a factor of 4 to 8, the precision of rice and cotton acreage estimates in the Delta region, starting with Mississippi and Arkansas in 1991.

PROBABILITY SURVEYS

Mr. WHITTEN. Have you achieved your goal of conducting monthly crop yield surveys of farmers on a probability basis in all states?

Mr. CAUDILL. The FY 1990 budget included funding to complete this program in all States. However, after the Gramm-Rudman-Hollings sequester, we were forced to delay full implementation of the monthly probability yield survey in all States until FY 1991. This year the surveys will cover 21 States, accounting for over 80 percent of the production for major crops.

EFFECTS OF EXCESSIVE SPRING RAIN

Mr. WHITTEN. On page 24g-2 of your explanatory notes you state that a special monthly survey was conducted in selected States to measure the effects of extensive rainfall during planting time. Please provide a description, including total cost of the surveys and the selected states.

Mr. CAUDILL. Spring 1989 planting progress in Indiana, Ohio, and Pennsylvania ran well behind average and, as a result, a large portion of the acreage reported during the June Agricultural Survey was only intentions to plant. These States were added to the monthly Probability Yield Surveys program beginning with the August 1989 survey. The August survey included acreage questions to update our planted and harvested acreage estimates for corn and soybeans. The out-of-pocket cost of the August survey was $10,000.

DATA USERS MEETING

Mr. WHITTEN. On page 24g-3 of the explanatory notes you state that six meetings were held in 1989 to obtain feedback on agency programs and provide detailed information on survey methodology to data users. Will you make any changes in your agency's programs as the results of these meetings? What types of users attended these meetings? What was the cost of these meetings?

Mr. CAUDILL. Our 1989 data user meetings focused specifically on procedures for fruits, vegetables, specialty commodities, and farm labor. The groups widely represented at the meetings included State government officials, individual producers, commodity organization representatives, university economists, and farm labor organizations. Many other interests were also represented. One major change in our program as a result of the input received is the farm labor initiative discussed earlier. Coordination among USDA agencies to use already existing peanut price information was suggested at one meeting, and we have been able to incorporate that procedure. We are now providing additional data in our Cold Storage reports in response to suggestions. The data user meetings resulted in specific funding from the wine industry in Oregon to collect information on grapes in Oregon for national reports. We will also be changing the designation of filberts to hazelnuts over a 3-year period as a result of an industry request. The out-of-pocket cost for NASS participants in the 1989 meetings was about $9,800. None of the outside participants traveled at U.S. Government expense.

ELECTRONIC STORAGE

Mr. WHITTEN. On page 24g-3 of your explanatory notes you state that an online data base system has been developed to store all current and historical estimates published by NASS. How are these estimates, both current and historical, being stored now?

Mr. CAUDILL. Computer tape files are kept for most major NASS estimates. Because of the data volume, many requests are filled by sending a data tape. Some requests are filled by downloading the data to a microcomputer and creating a diskette for mailing. As people gain access to microcomputers, the request for information on diskettes increases.

Mr. WHITTEN. How long will it take and what will be the cost to load all historical estimates into this data base?

Mr. CAUDILL. We have loaded estimates of prices received, all major crops, hogs and pigs, and cattle since 1939 to date. It could take up to 2 years to load the remainder of the published estimates, because estimates prior to 1939 and estimates for many of the other commodities are not currently in electronic media. The cost for loading all commodities, including staff time, is estimated at $300,000.

COMPUTER SERVICE CONTRACT

Mr. WHITTEN. What will be the annual cost of the eight-year teleprocessing service contract? What are the services provided in the contract? Why the need for an eight-year contract?

Mr. CAUDILL. This year's usage is expected to cost about $4,500,000. Toward the end of the 8-year contract, we foresee the cost to be about $6,500,000 per year based on an anticipated increase in use.

The contract provides the full range of services included in the GSA Teleprocessing Services Program. These include the cost of mainframe processing, file storage, software, microfiche generation, data communications, and technical support.

NASS has utilized large mainframe computers to process its surveys for over 25 years. For the past 15 years we have used a contract of this type to meet this need. It takes about 2 years from the start of the acquisition process to the signing of the contract. This requires NASS to use many staff hours in the procurement process. By amortizing the staff cost over 8 years instead of a shorter period, we feel that it has saved substantially on staff costs. Actually, the contract is written for only 1 year, but it can be renewed seven times. If the terms of the contract were to become unfavorable to NASS, or if NASS requirements were to decrease substantially during the next 8 years, the contract could be terminated at the end of any contract year.

Mr. WHITTEN. Will this contract cover upgrades to the system?

Mr. CAUDILL. Yes. The contract included a clause which provided for engineering changes. These changes may be proposed to save money, to improve performance, or to satisfy increased data processing requirements.

OTHER SERVICES

Mr. WHITTEN. The fiscal year 1991 estimate of $25,780,000 for Other Services is an increase of more than $6,000,000 over the fiscal year 1990 estimate. Please discuss the reasons for this increase.

Mr. CAUDILL. The increase of $6,000,000 is mostly due to data collection and processing costs associated with the new initiatives: Agricultural Labor Data, Improved Sampling Frame and Food Safety. Other contributing factors are increased costs for enumerator salaries and mileage funded through an agreement with the National Association of State Departments of Agriculture.

Mr. WHITTEN. Would you provide the Committee with a subobject class breakout of the Other Services object class in fiscal years 1989, 1990 and 1991?

Mr. CAUDILL. I will be happy to provide a sub-object class breakout for the Other Services object class in fiscal years 1989, 1990, and 1991 for the record.

[The information follows:]

NATIONAL AGRICULTURAL STATISTICS SERVICE

[Other Services FY 1989-91]

	Fiscal year—		
	1989	1990	1991
Agreement with the National Association of State Departments of Agriculture [NASDA] for data collection work (appropriated portion only)	$11,357,000	$12,227,000	$16,080,000
Training (Regular nonspecialized)	330,000	291,000	332,000
Departmental assessments	502,000	513,000	670,000
ADP	4,438,000	4,294,000	5,954,000
Research (excluding ADP):			
Agreements (including those with universities and other agencies)	543,000	447,000	490,000
Other cooperative agreements (excl. NASDA and ADP)	940,000	959,000	1,160,000
Maintenance agreements for machine repair	523,000	506,000	559,000
Miscellaneous	618,000	512,000	535,000
Total	19,251,000	19,749,000	25,780,000

PERSONNEL-RELATED

Mr. WHITTEN. Your request includes an increase of 175 staff years. Please provide the Committee with a detail on the need for these additional personnel.

Mr. CAUDILL. Earlier, I gave an overview of our plans for each of three special initiatives in fiscal year 1991—Agricultural Labor Data, Sampling Frame for Agriculture, and Food Safety. Each of these programs is either new requirements of NASS or a significant expansion of activity. We just are not able to absorb all of this extra work into our present staffing levels. We need at least 20 staff-years for the agricultural labor survey expansion, 45 for the sampling frame work, and 110 for the food safety initiative. About 80 percent of these positions will be distributed to the 45 field offices to provide a minimum amount of professional and support staff in each office to carry out these extensive data collection responsibilities. The food safety work will involve our staff in the subject area of agricultural chemicals, requiring specialized attention to some definitional details that will be relatively new to our statistical program. Questionnaire design, enumerator training, and review of collected data will need sufficient staffing for quality results.

OFFICE OF THE INSPECTOR GENERAL REPORT

Mr. Whitten. What were the findings of the OIG report entitled, "Review of National Agricultural Statistics Service Controls Over the Calculation of National Average Market Prices for the 1987-88 Marketing Year"?

Mr. Caudill. The findings of the OIG report entitled "Review of National Agricultural Statistics Service Controls Over the Calculation of National Average Market Prices for the 1987-88 Marketing Year" include some national office weaknesses, State office weaknesses, and a vulnerability assessment. The report noted that procedures and controls for calculating the National Average Market Price were not documented as well as they should be. Revisions from the State offices were occasionally accepted by telephone without hard copy verification or complete explanation. Miscellaneous, small calculation errors by the State offices and headquarters changed the annual marketing year average price for wheat for 1987 upward by one cent to $2.58 per bushel. However, after the regularly scheduled annual revisions for wheat were made, the price stood at $2.57, unchanged from the original 12-month average price used to calculate deficiency payments. Since the audit was completed, standard operational procedures have been written for these processes.

Some State offices were not always verifying data entered into the computer. Some errors were also made in manual calculations, rounding, not using the latest version of the questionnaire, improper coding, and transcription. Most of these errors are directly attributable to lack of staff to perform the needed cross checks. Revised instructions have been distributed to correct these problem areas.

In its fiscal year 1988 internal control assessment, NASS assigned a vulnerability rating of low to this area of our work. OIG recommends that controls over summarization, analysis, and publication of the National Average Market Prices be classified as "high" vulnerability and that NASS perform a complete assessment of these controls during the fiscal year 1990 vulnerability assessment. NASS agrees with this recommendation.

DISCONTINUED REPORTS

Mr. Whitten. Did you discontinue any reports during fiscal year 1989 and do you plan to discontinue any reports during fiscal year 1990? If so, please list these reports for the record, showing the frequency of the report, the total number of copies printed each year and the reason for discontinuing.

Mr. Caudill. NASS did not discontinue any reports during fiscal year 1989. During fiscal year 1990 we have discontinued the Winter Wheat and Rye Seedings report. This report was released annually with about 1,600 copies printed. By including the data from this report in the January Crop Production report, we were able to supply the same amount of data and lessen the number of individual reports, an advantage for both NASS and our data users.

REPORTS FUNDED BY PRIVATE SOURCES

Mr. WHITTEN. Are any of your reports funded by contributions from outside sources? If so, please indicate the source and the amount of contributions.

Mr. CAUDILL. In fiscal year 1989, NASS received $4,000 from the Hops Growers of America, Incorporated to prepare hops statistics for Washington, Oregon, Idaho, and California. In addition we received $28,000 from the Malting Barley Improvement Association for surveys on barley varieties in 10 States; $22,500 from the Wisconsin Milk Marketing Board, Incorporated for statistics on the supply, prices, and consumption of milk; $5,000 from the Catfish Farmers of America for the catfish statistics in Mississipi; $4,000 from Quaker Oats Company for a survey of South Dakota oat farmers regarding varieties of oats; $3,000 from the Washington Wheat Commission for a survey of Washington wheat farmers regarding varieties and classes of wheat; and $2,400 from the Colorado fruit industry for data regarding the age and density of apple and peach trees.

USER FEES

Mr. WHITTEN. Please list for the record all NASS reports that are now on a user fee basis and indicate the fee for each report.

Mr. CAUDILL. Reports are available for a fee from NASS headquarters and the State offices. Farmers and other respondents to our surveys, news media, congressional offices, and other Federal agencies receive requested reports without charge. I will provide for the record order forms which list the Agricultural Statistics Board publications and associated fees.

[The information follows:]

National Agricultural Statistics Service Order Form

Periodicals

NOTE: Single copies of periodicals issued since January 1989 ***available for $8.00, while supplies last.***

	1 Year	2 Years	3 Years
Field Crop Series			
Crop Production (monthly plus annual *Summary* plus copies of *Prospective Plantings and Acreage*)	___$30	___$57	___$82
Crop Progress (weekly, April through November)	___$25	___$47	___$67
Peanut Stocks and Processing (monthly)	___$14	___$25	___$34
Grain Stocks (quarterly)	___$11	___$19	___$25
Potato Stocks (6 issues plus 1 issue of *Potatoes*)	___$14	___$25	___$34
Rice Stocks (quarterly)	___$11	___$19	___$25
Hop Stocks (March & September)	___$8	___$13	___$16
Fruit And Vegetable Series			
Celery (monthly)	___$12	___$21	___$28
Noncitrus Fruits and Nuts (midyear and annual *Summary*)	___$12	___$21	___$28
Vegetables (monthly plus annual *Preliminary* and annual *Summary*)	___$17	___$31	___$43
Livestock Series			
Cattle (2 issues plus monthly issues of *Cattle on Feed*)	___$20	___$37	___$52
Hogs and Pigs (quarterly)	___$11	___$19	___$25
Livestock Slaughter (monthly plus annual *Summary*)	___$24	___$45	___$64
Poultry Series			
Egg Products (monthly)	___$15	___$27	___$37
Eggs, Chickens and Turkeys (monthly, plus copies of *Hatchery Production* annual, *Layers and Egg Production* annual, *Poultry Production and Value*, and *Turkeys*)	___$24 ___$14	___$45 ___$25	___$64 ___$34
Turkey Hatchery (monthly)	___$14	___$25	___$34
Poultry Slaughter (monthly)			
Dairy Series			
Dairy Products (monthly plus annual *Summary*)	___$20	___$37	___$52
Milk Production (monthly plus copy of *Milk Production, Disposition, and Income*)	___$16	___$29	___$40
Other Series			
Agricultural Prices (monthly)	___$24	___$45	___$64
Farm Production Expenditures (July & August)	___$12	___$21	___$28
Farm Labor (quarterly)	___$11	___$19	___$25
Catfish (monthly plus copies of *Catfish Production* in February & July)	___$15	___$27	___$37
Cold Storage (monthly plus annual *Summary*)	___$20	___$37	___$52
Sugar Market Statistics (quarterly)	___$11	___$19	___$25

Order form continued on next page.

National Agricultural Statistics Service Order Form

Monographs

***NOTE:** Pay one time and receive these annual publications automatically for the next 3 years.*

	Issue month	**1 Year**	**2 Years**	**3 Years**
Fruit and Vegetable Series				
Cherry Production	June	___$5.00	___$ 8.00	___$12.00
Citrus Fruits	September	___$5.00	___$ 8.00	___$12.00
Cranberries	August	___$5.00	___$ 8.00	___$12.00
Hazelnut (Filbert) Production	August	___$5.00	___$ 8.00	___$12.00
Walnut Production	September	___$5.00	___$ 8.00	___$12.00
Livestock Series				
Meat Animals: Production, Disposition, & Income	April	___$5.00	___$ 8.00	___$12.00
Sheep & Goats	February	___$5.00	___$ 8.00	___$12.00
Wool & Mohair	March	___$5.00	___$ 8.00	___$12.00
Prices and Expenditures Series				
Agricultural Prices Annual Summary	June	___$8.00	___$14.00	___$21.00
Crop Values	January	___$6.00	___$10.00	___$15.00
Prices Received, Minnesota-Wisconsin Manufacturing Grade Milk	June	___$5.00	___$ 8.00	___$12.00
Other Reports				
Mink	July	___$5.00	___$ 8.00	___$12.00
Mushrooms	August	___$6.00	___$10.00	___$15.00
Floriculture Crops	April	___$7.50	___$13.00	___$19.50
Honey	February	___$5.00	___$ 8.00	___$12.00
Capacity of Refrigerated Warehouses	February-even-numbered years	___$5.00	___$ 8.00	___$12.00
Trout Production	September	___$6.00	___$10.00	___$15.00

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CONSULTANTS

Mr. WHITTEN. Have you employed any consultants during the past year and if so, for what purposes?

Mr. CAUDILL. Yes. In fiscal year 1990, NASS has employed the services of a consulting firm to determine the feasibility of transferring database applications from the mainframe computer to NASS owned local area networks.

COOPERATIVE AGREEMENTS

Mr. WHITTEN. Would you please list for the record all cooperative agreements that were signed during fiscal year 1989, indicating the amount of each agreement as well as a description of the purpose of the agreement?

Mr. CAUDILL. I will provide a list of outgoing NASS Cooperative Agreements and amendments executed during fiscal year 1989 for the record.

[The information follows:]

COOPERATIVE AGREEMENTS

COOPERATOR	AMOUNT	PURPOSE
National Association of State Departments of Agriculture	$12,660,000	Data Collection
Washington Department of Agriculture	55,000	Crop Reporting Services
Pennsylvania Department of Agriculture	6,500	Assistance in Dissemination of Crop and Livestock Reports
Tennessee Department of Agriculture	8,000	Assistance in Dissemination of Crop and Livestock Reports
Michigan Department of Agriculture	5,000	Assistance in Dissemination of Crop and Livestock Reports
Montana Department of Agriculture	10,000	Assistance in Dissemination of Crop and Livestock Reports
Nebraska Department of Agriculture	28,000	Assistance in Dissemination of Crop and Livestock Reports
New Mexico Department of Agriculture	3,500	Assistance in Dissemination of Crop and Livestock Reports
North Carolina Department of Agriculture	10,000	Assistance in Dissemination of Crop and Livestock Reports
Alabama Department of Agriculture	7,000	Assistance in Dissemination of Crop and Livestock Reports
Idaho Department of Agriculture	2,000	Assistance in Dissemination of Crop and Livestock Reports
Georgia Department of Agriculture	8,000	Assistance in Dissemination of Crop and Livestock Reports
Louisiana Department of Agriculture and Forestry	3,000	Assistance in Dissemination of Crop and Livestock Reports

COOPERATOR	AMOUNT	PURPOSE
Oklahoma Department of Agriculture	12,000	Assistance in Dissemination of Crop and Livestock Reports
Texas Department of Agriculture	20,000	Assistance in Dissemination of Crop and Livestock Reports
Virginia Department of Agriculture and Consumer Services	5,000	Assistance in Dissemination of Crop and Livestock Reports
Maryland Department of Agriculture	2,300	Assistance in Dissemination of Crop and Livestock Reports
Oregon Department of Agriculture	5,000	Assistance in Dissemination of Crop and Livestock Reports
Colorado Department of Agriculture	5,000	Assistance in Dissemination of Crop and Livestock Reports
University of Houston - Clear Lake	30,000	Methodological Research for Improving Estimates
Minnesota Department of Agriculture	13,000	Assistance in Dissemination of Crop and Livestock Reports
Purdue University, AES	16,000	Assistance in Dissemination of Crop and Livestock Reports
Illinois Department of Agriculture	27,000	Assistance in Dissemination of Crop and Livestock Reports
Iowa Department of Agriculture	12,000	Assistance in Dissemination of Crop and Livestock Reports
Kansas Department of Agriculture	10,000	Assistance in Dissemination of Crop and Livestock Reports
Kentucky Department of Agriculture	5,000	Assistance in Dissemination of Crop and Livestock Reports
Wisconsin Department of Agriculture	15,000	Assistance in Dissemination of Crop and Livestock Reports

COOPERATOR	AMOUNT	PURPOSE
Maryland Department of Agriculture	32,800	Crop Reporting Services
Tennessee Department of Agriculture	55,700	Crop Reporting Services
American Statistical Association	80,000	Statistical Sampling Research
Virginia Department of Agriculture and Consumer Services	2,000	Crop Reporting Services
Georgia Department of Agriculture	29,500	Crop Reporting Services
Oklahoma Department of Agriculture	14,500	Crop Reporting Services
Southern University and A & M College (LA)	8,000	Cooperative Study Program
University of Maryland	25,959	Analysis of Survey Training Methods
Ohio State University	20,000	Small Area Estimation of Agricultural Products
Idaho Department of Agriculture	11,000	Crop Reporting Services
West Virginia Department of Agriculture	7,500	Crop Reporting Services
Wisconsin Department of Agriculture	23,000	Crop Reporting Services
New York Department of Agriculture	39,000	Computer Services
University of California	316,000	Computer Assisted Survey Products
Utah Department of Agriculture	15,000	Crop Reporting Services
Minnesota Department of Agriculture	77,000	Crop Reporting Services
Iowa Department of Agriculture	10,000	Computer Services
Illinois Department of Agriculture	18,500	Computer Services

COOPERATOR	AMOUNT	PURPOSE
Purdue University, AES	5,300	Crop Reporting Services
Louisiana Department of Agriculture and Forestry	73,000	Crop Reporting Services
New Mexico State University	3,500	Cooperative Study Program
North Carolina State University	2,000	Weather and Crop Report Program
Hawaii Department of Agriculture	3,300	Crop Reporting Services
North Carolina Department of Agriculture	20,000	Computer Services
North Carolina Department of Agriculture	80,000	Crop Reporting Services
Mississippi Department of Agriculture	64,900	Crop Reporting Services
New York Department of Agriculture	12,000	Crop Reporting Services
Nebraska Department of Agriculture	14,000	Crop Reporting Services
Maine Department of Agriculture	12,000	Crop Reporting Services
California Department of Food and Agriculture	3,000	Crop Reporting Services
University of Michigan	40,000	Survey Methodology Studies
University of Connecticut	15,000	Empirical Bayes Estimation Methodology
University of Arkansas	20,000	Crop Reporting Services
Michigan Department of Agriculture	23,000	Computer Services
Total:	$14,159,759	

AGENCY REQUEST

Mr. WHITTEN. What was your original budget request submitted to the Office of the Assistant Secretary and what did the Office of the Secretary submit to OMB?

Mr. CAUDILL. When the budget was submitted to the Assistant Secretary, the Secretary, and OMB, the costs associated with a general pay increase were not included because they were unknown at the time. Also unknown at that time was the amount of the sequester and the agency's decision to transfer to the Economic Research Service $100,000 for aquaculture. Putting the budget on a comparable basis thereby including those adjustments, a budget of $82,911,000 was submitted to the Assistant Secretary and the Secretary. The Department recommended a budget of $85,311,000 to OMB. The new increase from the budget submitted to the Secretary and the one submitted to OMB was caused by the Departmental initiative for Food Safety.

COMPUTER-ASSISTED INTERVIEWING

Mr. WHITTEN. On page 24g-4 of your explanatory notes, you talk about two computer-assisted interviewing projects, the Computer-Assisted Personal Interviewing or CAPI and the Computer-Assisted Telephone Interviewing or CATI. Please describe in further detail the difference between the two.

Mr. CAUDILL. CAPI is being studied to investigate the feasibility of collecting agricultural data using portable microcomputers in a personal interview situation. For a lengthy survey, advantages include some on-the-spot editing capability, direct data entry, and faster data transmission to our State offices using a modem. This allows the statistician to have more time for data analysis and could eventually lead to earlier publishing dates.

CATI has been implemented as an operational data collection tool in 14 of our State offices. CATI uses an interactive computing system to assist interviewers in collecting data by telephone. During 1989, NASS collected 150,000 interviews for State, regional, and national surveys using this technology. Experience to date shows that we are able to conduct telephone surveys easier and faster; we are able to control survey data quality; and we are able to respond to new survey data needs in a more timely fashion.

Mr. WHITTEN. What is the cost of each project, your expected completion data, and how will these two projects enhance your agency?

Mr. CAUDILL. The expected date for completion of the small pilot-level CAPI project is December 1990. The cost of the hardware for this effort is $35,000. The CAPI research project will enhance the Agency's cost efficient surveying capability. Survey technology is changing rapidly and this type of research and development will support the long-term data quality and productivity of the agricultural estimation program of the Agency.

The annual cost for the CATI software is approximately $125,000. This cost is unaffected by increasing the number of offices with CATI capabilities or the number of calling stations. We expect to have CATI software installed in all State Statistical Offices by mid-1992. The primary advantage of CATI is improvement in the quality of data. These capabilities also reduce the amount of time and number of contracts necessary from respondents. Other important advantages include increased efficiency in survey management, training, and supervision.

PERSONNEL COMPENSATION

Mr. **Whitten**. You are requesting $36.4 million for personnel compensation, an increase of $5.5 million over the amount available for fiscal year 1990. We also note that you are requesting an increase of 175 staff years and that you estimate that your average salary will be $34,516. Of course, new positions would be brought on at a lower average salary since the highest grade level to be added is GM-13. You have advised the Committee that $2.1 million of your total increase is for pay costs. That means that you are requesting $3.4 million for the 175 additional staff years. How can adding 130 positions cause your total staff years to increase by 175 staff years?

Mr. **Caudill**. Of the 175 additional staff years being requested, 130 are for full-time permanent positions. The remaining 45 are for positions other than full-time permanent, such as temporary and intermittent.

Mr. **Whitten**. Based on the table on page 24-4 of the explanatory notes, please provide a table for the record showing the GS schedule for the 130 additional positions.

Mr. **Caudill**. I will provide a permanent positions by grade table showing the increases by grade for fiscal year 1991.

[The information follows:]

Increases by grade for fiscal year 1991

Grade:	Number
13	25
12	18
11	12
9	13
8	2
7	15
6	16
5	16
4	10
3	3

Mr. **Whitten**. Please indicate for the record how 130 positions provide 175 staff years and how 175 staff years would average $19,429 when your average graded salary is $34,516.

Mr. **Caudill**. Of the 175 additional staff-years being requested, 130 are for full-time permanent positions. The remaining 45 are for positions other than full-time permanent positions. A large proportion of these requested staff-years are for low grades, under GS-9, thereby causing the average salary for the requested staff-years to be lower than the overall average salary. To fund the additional 175 staff-years for the new initiatives $4,062,000 was put into salaries including FY 1991 pay costs. This averages $23,211 per staff-year.

Mr. **Whitten**. Mrs. Smith.

FOOD SAFETY

Mrs. **Smith**. Now I want to turn to food safety a minute and talk with Mr. Caudill. I see that you want an increase for food safety. I am very much interested in your food safety comments and we are interested in water quality. I think we produce the safest food in the world, and the most abundant and widest variety, and the cheapest, but we do have a great news media hype about food safety. I think we do have a growing responsibility to assure that our food is so safe that we can't have these consumer media scares going on all the time. So I congratulate you and I salute you about what you are doing on this.

REMOTE SENSING

I wanted particularly to ask you, Mr. Caudill, to comment about the remote sensing data from the Landsat satellite. Are you currently using satellite information for your statistics? Did budgetary conditions cause you to make a change, or did you change because you thought the quality of the information wasn't good?

Mr. **Caudill**. Our efforts on remote sensing are now limited to a research effort to keep up with developments in that area. We were processing all of the Landsat remote sensing data for eight midwestern states up until two years ago, when we had to reduce the effort due to budget restrictions. We also knew that the satellites had outlived their design life. We didn't know whether there would be data in '89 and '90, so we decided to back up and do a thorough research effort on the new sensors that will be coming up on the next satellite, which will be launched in the future.

We have been studying satellite data from satellites of other countries and one conclusion we have reached in the last year in looking at the data from our satellites and data from the French SPOT satellite, which is selling data all over the world, is that our own data is better for agricultural purposes and much less expensive, so we have had a complete turnaround from saying that the French satellite might replace what the U.S. is doing. We don't think that is true and are looking forward to the launch of a new U.S. satellite and a new set of data which I think will be even better than what we are getting now.

We are prepared to use satellite data. It is an expensive source of information, particularly the processing of tremendous quantities of data. It is budgetary restrictions that has caused us to be in the current situation of not using remote sensing data on a permanent basis. We have had efficiencies in using this data for land area sampling frames that is going to give us a productivity increase of at least eight and maybe ten times. We can do the same job in about one eighth of the time that we could do it before, as long as we can get satellite data and process it properly.

AQUACULTURE

Mr. **Whitten**. Mr. Akaka.

Mr. **Akaka**. Thank you very much, Mr. Chairman.

It is good to have you here. I noticed by your budget justification, that you have executed an agreement with NASS under which you will perform the aquacultural situation and outlook report, and I have three questions with respect to this.

One is to explain what the theory is behind this transfer.

Second, what are the aquacultural species that will be surveyed and third, what states will be covered?

If it is going to be lengthy, you can provide it for the record for me.

Mr. **Caudill**. When the Congress proposed funds three years ago for aquaculture, inadvertently all the funds came to NASS, although ERS was assigned responsibility for the outlook, so that may be the source of the confusion about the money that we have been transferring back and forth.

ERS will do the outlook portion and we will collect the data. We are presently conducting two catfish surveys each year in the major catfish states, and we are studying the impact of increasing the number of those states now. For fiscal year 91, we have worked with the industry and have agreed to add a quarterly survey in the four most important states, Alabama, Mississippi, Louisiana and Arkansas, for catfish. That will add a March and September survey.

We have been doing one trout survey annually in September of each year. In addition, we are taking a look at the whole aquaculture industry, and working on a program to do a general survey perhaps in '91 to find out what other aquacultural crops we need to be surveying. Salmon is growing, bait fish is a big industry in some states and some of our State Departments of Agriculture already have funded those surveys.

Alligators are another possible aquacultural crop since commercial production of alligators is growing. Our Florida office has already done two surveys in the State of Florida for the State Department of Agriculture. Next year we may look at the industry and restructure the program to survey those things which are growing and of particular interest to the industry. That might mean we have to cut back on some of the ongoing surveys to be able to afford that, but we are looking at that now.

Mr. **Akaka**. I think you know the Chairman here has a keen interest in aquaculture and this is a growing industry, so therefore, there is deep interest in that.

GLOBAL CHANGE

I was interested to read the following statement in your justification regarding global climatic conditions. "A significant degree of current consensus exists among scientists that agriculture in the middle latitude areas, including the United States and Western Europe, may suffer from a warmer and drier climate, while agricultural areas in Canada, the USSR, China and Australia, may benefit from longer growing seasons and in some cases, greater precipitation." What are you doing to provide agencies like ARS and CSRS, with the data necessary for them to adjust their research agenda so that they can plan for such changes?

Mr. **Gardner**. Well, on this whole question of global change and climate change and how it is affecting agriculture, you have cited the results of one set of findings. There are many studies that have been done. In ERS, they are doing some of this work and have assessed some of the other work.

One of the things that comes out of that work is that the extent of global warming that people talk about having in the next 80 years, say to 2050, may be substantial, but it is not as substantial as the range of variations we have across our country today. So in a sense, the kind of research that you need to get ready for a climate change is the kind that we already do in trying to adapt our crops to the whole wide variety of conditions that exist in the United States.

Where I think we could help with our economic research and with what the bilateral scientists do, is giving more detail on what kinds of changes we can expect, how much variability we might have.

In addition to getting warmer, we may see more variable weather and what species can adapt best to that.

Mr. **Akaka**. Is our normal process to share this with ERS and CSRS?

Mr. **Gardner**. Yes.

Mr. **Akaka**. Thank you, Mr. Chairman.

Mr. **Whitten**. Mr. Skeen?

FOOD SAFETY

Mr. **Skeen**. On food safety, I know it is one of your big items along with water quality. How closely connected are you with EPA on these issues? Do you have a great deal of input and coordination with them in this data collection?

Dr. **Gardner**. There is a lot of coordination. Most of it, though, is not with the NASS part, which is looking at farm use of pesticides, but in the Agricultural Marketing Service aspect of it, in the residue work. That has to be done in very close cooperation with FDA and EPA.

There is ongoing discussion on how to carry that out.

SEASONAL AGRICULTURAL WORKERS

I want to get to something that is a little closer to home. I asked you once before about seasonal workers, your estimates of how well-equipped you were to predict shortages or problems associated with that. In New Mexico we have had problems with shortages of labor in livestock, our great new number one crop, chili harvesting. I know that we are not one of your target States, but have you done any work on that type of labor shortage prediction, particularly in processing and harvesting?

Mr. **Caudill**. You will be interested to know we have had meetings with the State Department of Labor in the State of New Mexico, and working with them, and the State Department of Agriculture, we have some proposals to expand the labor surveys in New Mexico using State funds.

We think that is going to materialize. If it does not, we would certainly take a look at the increase we are requesting, because it has been pointed out to us that in New Mexico, there are some critical data needs as far as the labor supply is concerned.

As part of the IRCA, you are aware that we had to produce some new data on forecasting the total demand for agricultural labor in seasonal agricultural crops. We did that for the first time this past year when in early September, we delivered to the Secretary of Agriculture our estimate, ours and ERS's, of the total demand of seasonal agricultural workers that would be needed in 1990.

We looked first at the base, the base estimates as we collected that data from farmers. ERS did some work to predict how new technology would affect the need for labor and these sorts of things. We came up with an estimate for the total demand for labor in agriculture for 1990. That was given to the Secretary and was used by him and the Secretary of Labor in setting the quota or lack of quota for Replacement Agriculture Workers—RAWS—that could come into this country.

Mr. **Skeen**. Is that SAW workers?

Mr. **Caudill**. SAWS and RAWS, yes.

Mr. **Skeen**. That is very good, because I asked you that question the last time you were here. I appreciate the response and the ability to expand yourself into that kind of a problem, because with the new immigration laws and some of the other things that have occurred, we want to make it work and keep ahead of this curve, and you folks are instrumental in doing that.

On seasonal shortages of this kind it is absolutely essential that if you are going to have a smooth-running agriculture harvesting program that we understand at least where these shortages occur. So I commend you on getting that done. I thank all of you for your presentation today.

Thank you, Mr. Chairman.

Mr. WHITTEN. Thank you.

Mr. Smith?

PRAWNS AND CRAYFISH

Mr. SMITH. I wonder if you have done any market surveys on prawns and crayfish?

Mr. CAUDILL. We do have estimates on pecans. . . .

Mr. SMITH. No. Prawns, prawns and crayfish?

Mr. CAUDILL. No, we have not. That would be looked at in the proposed general survey of aquaculture next year.

Mr. SMITH. I know production isn't great yet, but it is increasing very rapidly.

Mr. WHITTEN. Thank you very much.

BIOGRAPHICAL SKETCH

DONALD M. BAY

Deputy Administrator for Operations
National Agricultural Statistics Service

Mr. Bay grew up on a farm in Springfield, Illinois. He received his B.S. degree in Agricultural Economics from the University of Illinois in June 1957. He began his career in agricultural statistics in the Illinois State Statistical Office in 1959. In 1961, he was transferred to the Tennessee State Statistical Office. He transferred to Washington, D.C in 1965 to serve as a Commodity Statistician in the Livestock, Dairy and Poultry Branch.

In 1970, as a Statistical Clearance Analyst, he was constantly dealing with other Government Agencies regarding their survey proposals, functioning as a liaison for USDA Agencies, and OMB to obtain statistical clearance. This provided opportunities for developing skills of negotiation.

From 1971 to 1975, he served as Head of the Cotton and Special Crops Section, Crops Branch. He was responsible for the estimation and forecasting programs in his Section. While in this position, he testified for the House and Senate Agricultural Committee for support for legislation which changed the law governing NASS cotton reports.

From 1975 to 1987, he served as State Statistician in the Missouri State Statistical Office. As State Statistician, it was his responsibility to maintain good working relations with the agricultural leaders in the State. He was an ex-officio of the Governor's Advisory Council for 12 years which provided an excellent opportunity to work closely with other farm leaders. He served as Chairperson of the Missouri Agricultural Leaders Group. He served as Chairperson of the Missouri Food and Agriculture Council in 1981 and 1982 which consisted of the Heads of all Federal Agencies in the State. He was a senior staff member of the Missouri Department of Agriculture.

Following this assignment, he returned to Washington, D.C. to serve as Director of Estimates Division. He was directly responsible for the Agency estimating and forecasting program. This included the responsibility for estimation methodology and estimating national crop, livestock, dairy, poultry, price, and farm labor statistical data. He assumed a lead role within NASS in establishing data collection, editing, summarization, and analysis of survey data so that the official estimates meet the highest degree of accuracy as possible. As Director of Estimates Division, he has been directly responsible for holding user group meetings. These meetings include major agribusinesses, industries, and farmers. In February 1990, he was appointed Deputy Administrator for Operations.

He led an Economic and Statistic delegation to the Peoples Republic of China in 1981. He also assisted Rwanda and Cameroon in Africa and Thailand in Southeast Asia with developing improved agricultural statistics programs.

(February 1990)

NATIONAL AGRICULTURAL STATISTICS SERVICE

Statement of Charles E. Caudill, Administrator, before the Subcommittee on Rural Development, Agriculture, and Related Agencies.

Mr. Chairman and members of the Committee, it is an honor to appear before this distinguished Committee to present the National Agricultural Statistics Service's (NASS) FY 1991 budget request. The Committee's continued recognition of the need for a strong agricultural statistics program and your support are appreciated.

The NASS administers the USDA's program of collecting, compiling, and disseminating current national and State agricultural statistics. Research designed to improve the statistical methods and techniques used to produce agricultural statistics is also conducted. In addition, NASS performs reimbursable survey work for other Federal, State, and producer organizations.

Statistical data developed by NASS on the Nation's agriculture are essential for the orderly development of production and marketing decisions by farmers, ranchers, and other agribusinesses. These agricultural data series are also used for monitoring the ever-changing agricultural sector and for making and carrying out agricultural policy relating to farm program legislation, commodity programs, agricultural research, rural development, and related activities.

Fiscal Year 1991 Budget Request

The fiscal year 1991 budget request is $81,151,000. This request includes a total increase of $14,275,000: $1,850,000 to collect additional hired agricultural labor and wage rate data; $2,400,000 to develop a more comprehensive list sampling frame; $7,000,000 to provide improved data for a comprehensive food safety information system; $925,000 for statistical quality improvements including cooperative research; and $2,100,000 for pay costs.

Major Activities of the National Agricultural Statistics Service (NASS)

The primary activities of NASS are the collection, summarization, analyses of data, and publication of accurate and reliable agricultural forecasts and estimates. Thousands of farmers, ranchers, agribusinesses, and others voluntarily respond to nationwide surveys about crops, livestock, prices, and other agricultural activities. These surveys are supplemented by field observations, objective yield counts and measurements, and other administrative data to provide reliable information. Annually, estimates for about 120 crops and 45 livestock items are published in about 300 reports prepared by NASS's Agricultural Statistics Board (ASB).

The agricultural production and marketing data that are developed and published by NASS include: number of farms and land in farms; acreage, yield, and production of grains, hay, oilseeds, cotton, tobacco, some fruits and vegetables, floriculture, and other specialty crops; stocks of grains; inventories and production of hogs, cattle, sheep and wool, goats, catfish, trout, poultry, eggs, and dairy products; prices received by farmers; prices paid by farmers for inputs and services; cold storage supplies; agricultural labor and wage rates; and other data related to the agricultural economy.

The NASS agricultural statistics program is conducted through 45 State Statistical Offices (SSO's) servicing all 50 States. These SSO's are operated under cooperative funding arrangements with State Departments of Agriculture and/or Land-Grant universities. This arrangement efficiently serves the agricultural data needs at both the State and Federal levels and eliminates duplication of effort. Twenty-three of the NASS State offices are physically located in State office buildings. These beneficial collocations provide increased service and additional agricultural data for State and local needs while minimizing overall costs to the Federal Government.

A research program is conducted to improve the statistical methods and techniques used in developing agricultural statistics. This research is directed towards improved sampling, yield forecasting, and survey techniques. A remote sensing research program is continuing with the objective of increasing the accuracy of domestic crop acreage and land cover estimates.

The NASS also conducts surveys on a reimbursable basis for other Federal, State, and private agencies or organizations. Our existing survey capability can provide these services much more efficiently than having each agency conduct its own surveys. In addition, technical assistance in the development of agricultural statistics programs in foreign nations is also conducted on a reimbursable basis.

The NASS periodically seeks input on data needs and priorities from data users through individual contacts, meetings with commodity groups, ASB briefings, other Departmental and Federal agency contacts, and regional data user meetings. The Agency has made many adjustments in its program in response to suggestions made by data users indicating that new data series or changes in current series are needed. Users support the policy that statistical efforts should continue to place emphasis on data quality over quantity. Although NASS has received some budgetary increases in recent years, these were mostly for specific program changes. Funds to offset inflationary costs have generally not been approved. This has led to a decline in real resources. Fewer real resources have resulted in deterioration in the quality of some statistical series. Balancing program needs against available funds has become progressively more difficult. Requests continue for expanded detail, wider geographic coverage, more frequent reports, new data series, and restoration of data series discontinued because of budget restrictions.

Fiscal Year 1991 Plans

The budget request includes an increase of $1,850,000 for additional agricultural labor and wage rate data. There is an urgent demand for data of greater reliability and for more specific geographic coverage. Improvement is also needed in the frequency of reports and some survey procedures. This increase would provide for increased frequency of estimates of hired workers during peak labor periods and expanded coverage of farm labor wage rate information for seasonal production activities in the 10 largest agricultural labor States. Monthly estimates would be produced for three States and the remaining seven would have monthly coverage from April through October plus a January survey. Other States in the program would continue with the present quarterly coverage by regions.

An increase of $2,400,000 is requested for an improved sampling frame for agriculture. There is a need for more comprehensive list frame coverage to permit more efficient survey designs, data collection processes, and maintenance procedures. This initiative would also respond to the Office of Management and

Budget efforts to name NASS as the responsible agency for development and maintenance of a central farm list for all Federal agricultural statistics programs and will result in an improved mailing list for the 1992 Census of Agriculture. Frame coverage would be made more comprehensive by acquiring additional administrative lists from USDA agencies and other sources and by having field enumerators active in targeted areas to locate operators not currently on the list. Frame coverage would be made more complete for commercial farms and for various types of farms that are currently considered to be most incomplete on the current list. Maintenance procedures would also be improved in order to eliminate nonfarms from the frame and reduce within-list duplication which can be a source of serious statistical bias. This work is a critical prerequisite for the Department's food safety and water quality initiatives.

The budget request includes $7,000,000 for improved data for food safety. There is a critical need to build a comprehensive food safety information system to aid public policy decision making. An adequate chemical use data base does not currently exist. Many public policy officials and most Americans assume that there exists somewhere up-to-date, detailed data about the quantity of specific pesticides being applied to individual crops. They are seriously mistaken. The last extensive collection of pesticide use data for major field crops was in 1982. For specialty crops, where dietary exposure can be high, the data collection is even more out-of-date. This request aimed at improvement of food safety is part of a $25,000,000 Department of Agriculture data initiative. NASS activities will include surveys of farmers to determine the types and amounts of chemicals that are used on specific crops at the farm level in each State. These funds will be supplemented with other funding from the Economic Research Service and possibly from State Departments of Agriculture in order to maximize commodity coverage and frequency of reports. Information will be collected on a 3-year cycle for 30 commodities, covering about 90 percent of U.S. production, and will have State-level reliability. A series of regular reports using these farm level data will provide the critical statistics to assess issues related to food safety, water quality, and pesticide regulation programs and policies.

Because of the budget restraints in FY 1990, NASS was forced to make certain program modifications. The $925,000 would be used to restore increased geographic coverage and/or increased sample size for the crop yield surveys and strengthen the objective yield measurement surveys for rice, wheat, and soybeans. The reliability of the midyear cattle survey would also be improved, as would NASS's ability to continue cooperative research with universities in the areas of improved sampling, data collection, and forecasting techniques.

The $2,100,000 would be used to fund the increased pay costs for FY 1989 and one-half of the anticipated FY 1991 pay costs. Fiscal year 1990 pay costs are totally absorbed in FY 1991. Continued absorption of pay and other inflationary costs has reached the point where reductions in critical parts of the base crop and livestock estimating program can no longer be avoided.

This concludes my statement, Mr. Chairman, and I will be happy to respond to your questions.

NATIONAL AGRICULTURAL STATISTICS SERVICE

Purpose Statement

The National Agricultural Statistics Service (NASS) was reestablished as a separate agency in the USDA on September 30, 1981. The primary responsibilities of NASS are the development and issuance of national and State agricultural statistics and the conduct of statistical research as authorized under the Agricultural Marketing Act of 1946 (7 U.S.C. 1621-1627).

NASS programs are conducted in the following major areas:

1. Crop and Livestock Estimates. This area includes the conducting of mail, enumerative and objective measurement surveys; summarizing and analyzing survey data; developing estimates of production, supply, price and other aspects of the agricultural economy; preparation and issuance of the official USDA national and State estimates and reports relating to acreages, types, and production of farm crops, number of livestock on farms, livestock products, stocks of agricultural commodities, value and utilization of farm products, prices received and paid by farmers, and other subjects as required.

2. Statistical Research and Service. This area includes the research on and development of improved statistical techniques used in gathering and evaluating statistical data, including use of satellite data.

3. Work Performed for Others. Services are performed for other Federal and State agencies and private commodity organizations on a reimbursable or advance payment basis. These services consist primarily of conducting surveys and performing related statistical data collection activities. They also include technical consultation and support, and technical assistance programs abroad under participating agency service agreements.

The National Agricultural Statistics Service maintains a central office in Washington, D.C., with a large part of the agricultural statistics program carried out through 45 State Statistical Offices serving the 50 States. Most State Statistical Offices are operated as joint State and Federal services through cooperative arrangements with various State agencies. As of September 30, 1989, the Service had 1,006 full-time permanent employees and 106 part-time employees, including 363 permanent full-time and 47 part-time employees located in Washington, D.C.

NATIONAL AGRICULTURAL STATISTICS SERVICE

Available Funds and Staff-Years

1989 Actual and Estimated 1990 and 1991

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
National Agricultural Statistics Service	$63,488,000	954	$66,876,000	921	$81,151,000	1,096
Obligations under other USDA appropriations:						
Agricultural Cooperative Service for data processing and consulting services	75,000	—	75,000	—	75,000	—
Agricultural Marketing Service for data on milk prices	55,000	1	56,000	1	56,000	1
Animal and Plant Health Inspection Service for animal health monitoring system	153,000	2	360,000	5	360,000	5
Agricultural Research Service for the Environmental Monitoring and Assessment Program	—	—	25,000	—	25,000	—
Agricultural Stabilization and Conservation Service (CCC) for data on feed grains	100,000	1	100,000	1	100,000	1
Economic Research Service for data on cropping practices, farm costs and returns, farm and rural land markets, land transfer, land values, farm real estate taxes and water quality	3,351,000	53	4,393,000	60	4,393,000	60
Extension Service for printing	—	—	2,500	—	2,500	—
Foreign Agricultural Service for data on sugar	62,000	1	66,000	1	66,000	1
Federal Crop Insurance Corporation for acreage and yield production data on insured crops	540,000	8	575,000	8	575,000	8
Forest Service for data on grazing fees	33,000	—	33,000	—	33,000	—
Human Nutrition Information Service for consulting services	100,000	2	100,000	2	100,000	2
World Agricultural Outlook Board for printing of grain report and lockup support	6,275	—	6,500	—	6,500	—
Total, Other USDA Appropriations	4,475,275	68	5,792,000	78	5,792,000	78
Total, Agriculture Appropriations	67,963,275	1,022	72,668,000	999	86,943,000	1,174

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Other Federal Funds:						
Commerce, Department of, for data on horticulture and land ownership, State and county estimates, and Census of Agriculture.....	217,940	3	15,000	—	15,000	—
Interior, Department of, for data on grazing fees.......	33,000	—	33,000	—	33,000	—
Labor, Department of, for assistance in research on computer assisted telephone interview techniques.	190,000	—	125,000	—	125,000	—
Office of International Cooperation and Development (from AID) for training, technical assistance, and equipment.................	1,010,078	10	935,000	9	935,000	9
Total, Other Federal Funds.	1,451,018	13	1,108,000	9	1,108,000	9
Non-Federal Funds:						
State Agencies for survey work.........................	1,352,341	22	1,700,000	24	1,700,000	24
Miscellaneous Contributed Funds for distribution of crop releases and data tapes, nutrient analysis and for data on catfish, honey, hops, malting barley, milk, oats, soybeans, turfgrass, water, and wheat..................	219,499	2	200,000	2	200,000	2
Total, Non-Federal Funds.	1,571,840	24	1,900,000	26	1,900,000	26
Total, National Agricultural Statistics Service...........	70,986,133	1,059	75,676,000	1,034	89,951,000	1,209

Full-time Equivalent Staff-Years:	1989 Actual	1990 Estimated	1991 Estimated
Ceiling........................	1,059	1,034	1,209
Non-ceiling....................	1	2	2
Total..........................	1,060	1,036	1,211

NATIONAL AGRICULTURAL STATISTICS SERVICE

Permanent Positions by Grade and Staff-Year Summary

1989 and Estimated 1990 and 1991

Grade	FY 1989			FY 1990			FY 1991		
	Headquarters	Field	Total	Headquarters	Field	Total	Headquarters	Field	Total
ES-5	1	--	1	1	--	1	1	--	1
ES-4	5	--	5	4	--	4	4	--	4
ES-3	1	--	1	1	--	1	2	--	2
ES-2	--	--	--	1	--	1	1	--	1
ES-1	1	--	1	1	--	1	--	--	--
GS/GM-15	18	13	31	18	13	31	18	13	31
GS/GM-14	35	37	72	36	37	73	36	37	73
GS/GM-13	117	68	185	115	68	183	130	78	208
GS-12	30	91	121	30	90	120	34	104	138
GS-11	16	61	77	16	60	76	18	70	88
GS-9	15	54	69	15	53	68	17	64	81
GS-8	15	1	16	15	1	16	17	1	18
GS-7	25	69	94	25	68	93	28	80	108
GS-6	33	84	117	32	83	115	36	95	131
GS-5	34	82	116	33	81	114	37	93	130
GS-4	12	58	70	12	57	69	14	65	79
GS-3	3	20	23	3	20	23	3	23	26
GS-2	2	--	2	2	--	2	2	--	2
Other Graded Positions.....	--	5	5	--	5	5	--	5	5
Total Permanent Positions.....	363	643	1,006	360	636	996	398	728	1,126
Staff-Years									
Ceiling.......	393	666	1,059	366	668	1,034	401	808	1,209
Non-Ceiling...	--	1	1	1	1	2	1	1	2
TOTAL.......	393	667	1,060	367	669	1,036	402	809	1,211

NATIONAL AGRICULTURAL STATISTICS SERVICE

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

	1989	1990	1991
Personnel Compensation:			
Headquarters	13,057,949	12,595,000	12,981,000
Field	17,662,681	18,238,000	23,400,000
11 Total personnel compensation	30,720,630	30,833,000	36,381,000
12 Personnel benefits	5,637,549	6,031,000	7,042,000
13 Benefits for former personnel	11,764	7,000	7,000
Total Pers. Comp. & Benefits	36,369,943	36,871,000	43,430,000
Other Objects:			
21 Travel	1,137,046	1,429,000	1,748,000
22 Transportation of things	275,503	316,000	345,000
23.3 Communications, utilities and miscellaneous charges	3,293,290	3,330,000	3,839,000
24 Printing and reproduction	450,577	526,000	569,000
25 Other services	19,151,511	19,749,000	25,780,000
26 Supplies and materials	941,246	1,137,000	1,474,000
31 Equipment	1,712,205	3,518,000	3,966,000
43 Interest and dividends	1,407	--	--
Total other objects	26,962,785	30,005,000	37,721,000
Total direct obligations	63,332,728	66,876,000	81,151,000
Position Data:			
Average Salary, ES positions	$75,525	$77,675	$95,125
Average Salary, GM/GS positions	$32,511	$33,761	$34,516
Average Grade, GM/GS positions	9.3	9.3	9.2

NATIONAL AGRICULTURAL STATISTICS SERVICE

The estimates include appropriation language for this item as follows (new language underscored: deleted matter enclosed in brackets):

NATIONAL AGRICULTURAL STATISTICS SERVICE:

For necessary expenses of the National Agricultural Statistics Service in conducting statistical reporting and service work, including crop and livestock estimates, statistical coordination and improvements, and marketing surveys, as authorized by the Agricultural Marketing Act of 1946 (7 U.S.C. 1621-1627) and other laws, [$67,901,000] $81,151,000: Provided, That this appropriation shall be available for employment pursuant to the second sentence of section 706(a) of the Organic Act of 1944 (7 U.S.C. 2225), and not to exceed $40,000 shall be available for employment under 5 U.S.C. 3109.

NATIONAL AGRICULTURAL STATISTICS SERVICE

Appropriations Act, 1990		$67,901,000
Budget Estimate, 1991		81,151,000
Increase in Appropriation		+ 13,250,000
Adjustments in 1990:		
Appropriation Act, 1990	$67,901,000	
Gramm-Rudman-Hollings Reductions (P.L. 99-177)	-925,000	
Activities transferred to the Economic Research Service a/	-100,000	
Adjusted base for 1990		66,876,000
Budget estimate, 1991		81,151,000
Increase over adjusted 1990		14,275,000

a/ Pursuant to an agreement between the Economic Research Service and the National Agricultural Statistics Service, $100,000 for an aquaculture situation and outlook report will be transferred to the Economic Research Service from the National Agricultural Statistics Service for FY 1990. On a comparable basis, the full annual cost of the activity is $100,000 for FY 1990 and $100,000 for FY 1991.

SUMMARY OF INCREASES

(On basis of adjusted appropriation)

Item of Change	1990 Estimated	Pay Cost	Program Changes	1991 Estimated
Agricultural Labor Data	$2,480,000	---	+ $1,850,000	$4,330,000
Improved Sampling Frame for Agriculture	4,068,000	---	+ 2,400,000	6,468,000
Improved Data for Food Safety	---	---	+ 7,000,000	7,000,000
All Other	60,328,000	+ $2,100,000	+ 925,000	63,353,000
Total Available	66,876,000	+ 2,100,000	+ 12,175,000	81,151,000

PROJECT STATEMENT
(On basis of adjusted appropriation)

Project	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
1. Crop and Livestock Estimates	$60,435,728	913	$63,784,000	880	(1) +$14,137,000	$77,921,000	1,055
2. Statistical Research and Service	2,897,000	41	3,092,000	41	(2) 138,000	3,230,000	41
Unobligated balance	155,272	--	--	--	--	--	
Total available or estimate	63,488,000	954	66,876,000	921	+ 14,275,000	81,151,000	1,096
Transfer to ERS for Aquaculture	100,000	--	100,000	--			
Gramm-Rudman-Hollings Reduction	--	--	925,000	--			
Total, appropriation	63,588,000	954	67,901,000	921			

EXPLANATION OF PROGRAM

The National Agricultural Statistics Service has two major activities authorized by the Agricultural Marketing Act of 1946, as follows:

-- Crop and Livestock Estimates - Agricultural production and marketing data are collected, summarized, analyzed, and published for a wide range of items including: number of farms and land in farms; acreage, yield, and production for grains; inventories and production of hogs, cattle, sheep and wool, goats, catfish, trout, poultry, eggs, and dairy products; prices paid for commodities and services, and related indexes; cold storage supplies, and related areas of the agricultural economy. Estimates for about 120 crops and 45 livestock items are published in about 300 Federal reports each year. All information is made available to the public and news media at scheduled release times.

-- Statistical Research and Service - Research is conducted to improve the statistical methods and techniques used in developing agricultural statistics. This research is directed toward better sampling, yield forecasting, and survey techniques. Research under the remote sensing program is continuing to improve the accuracy of domestic and foreign crop acreage and land cover estimates.

OIG Reports:

USDA, Office of Inspector General (OIG), Audit Report No. 2909-44-Te, dated September 1989, entitled "Review of National Agricultural Statistics Service Controls Over the Calculation of National Average Market Prices for the 1987-88 Marketing Year"(Final Report)

USDA, OIG Audit Report 29530-1FM dated November 21, 1988, entitled "Review of Security Over National Agricultural Statistics Service and World Outlook Board Statistical Forecasting Data"(Final Report)

USDA, OIG Audit Report No. 26600-1At(1) dated October 6, 1989, entitled "Review of Data Used to Determine Deficiency Payment Rates for Upland Cotton" (ongoing)

JUSTIFICATION OF INCREASES

(1) An increase of $14,137,000 for crop and livestock estimates consisting of:

(a) An increase of $2,005,000 for pay costs: $1,313,000 for FY 1989 paycosts, and $692,000 for one-half of FY 1991 paycosts. (The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.)

(b) An increase of $1,850,000 for Agricultural Labor Data. ($2,480,000 available in 1990).

Need for Change. There is an urgent demand for more hired agricultural labor and wage rate data of greater reliability and for more specific geographic areas. Improvement is also needed in the frequency of reports and some survey procedures.

Nature of Change. There will be increased frequency of estimates of hired workers during peak labor periods and expanded coverage of farm labor wage rate information for seasonal production activities in ten States selected on the basis of seasonal and total labor usage. Three States (California, Florida and Texas) would have monthly coverage and the remaining seven (Michigan, New York, North Carolina, Pennsylvania, Oregon, Washington and Wisconsin) would have monthly coverage from April through October and a January survey. The remaining 39 States, excluding Alaska, would continue with quarterly regional coverage.

(c) An increase of $2,400,000 for Improved Sampling Frame for Agriculture ($4,068,000 available in 1990).

Need for Change. There is a need for more comprehensive list frame coverage to permit more efficient survey designs, data collection processes, and maintenance procedures. This initiative would also respond to OMB efforts to name NASS as the responsible agency for development and maintenance of a central farm list for all Federal statistical programs and will result in an improved mailing list for the 1992 Census of Agriculture.

Nature of Change. Frame coverage would be made more comprehensive by acquiring additional lists from USDA and other sources and by having field enumerators active in targeted areas to locate operators not currently on the list. Frame coverage would be made more complete for commercial farms and for various types of farms that are currently considered to be most incomplete on the current list. Maintenance procedures would also be improved in order to eliminate non-farms from the frame and reduce within-list duplication which can be a source of serious statistical bias.

(d) An increase of $7,000,000 for Improved Data for Food Safety ($0 available in 1990).

Need for Change. There is a critical need to build a comprehensive food safety information system to aid public policy decisionmaking. An adequate chemical use data base does not currently exist. The last extensive collection of pesticide use data for major field crops was in 1982. For specialty crops, where dietary exposure can be high, the data collection is even more out of date. The Improvement of Food Safety is part of a $25,000,000 Department of Agriculture data initiative. The NASS responsibility covers chemical usage at the farm level while other Agencies (HNIS, AMS) are responsible for measuring chemical residues at later stages in the food chain.

Nature of Change. Surveys of farmers will be conducted in order to determine the types and amounts of chemicals (pesticides, herbicides, fertilizers, etc.) that are used on specific crops in each State. These funds will be supplemented with other funding from ERS and possibly from State Departments of Agriculture in order to maximize commodity coverage and frequency of reports. Information will be collected on a three-year cycle for 30 commodities, covering about 90 percent of U.S. production, and will have State-level reliability. A series of regular reports using these farm level data will provide the critical statistics to assess issues related to food safety, water quality, and pesticide regulation programs and policies.

(e) An increase of $882,000 for Statistical Quality Improvements.

Need for Change. Data users, including Federal officials, continue to request more accurate information. Therefore, NASS is requesting funds to restore survey capabilities that were eliminated in FY 1990 because of budget restraints.

Nature of Change. Restored survey capabilities would include broader geographic coverage and/or increased sample sizes for the crop yield survey program; objective yield measurement surveys for rice, wheat, and soybeans; and improved reliability for the mid-year cattle survey.

(2) An increase of $138,000 for statistical research and service consisting of:

(a) An increase of $95,000 for pay costs: $69,000 for FY 1989 paycosts, and $26,000 for one-half of FY 1991 paycosts. (The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.)

(b) An increase of $43,000 for cooperative research projects with outside organizations.

Need for Change. Research is critical for future viability of statistical programs. Because of budget restraints, the NASS research program has been reduced in the last few years making it difficult to keep abreast of new methodology or to do sufficient basic statistical research.

Nature of Change. This increase would permit NASS to continue its cooperative research projects with universities and statistical organizations for programs associated with improved sampling, data collection, and forecasting techniques.

NATIONAL AGRICULTURAL STATISTICS SERVICE
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 and Estimated 1990 and 1991

	1989		1990		1991	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Alabama........	$697,454	13	$735,000	13	$937,000	16
Alaska.........	103,118	2	109,000	2	139,000	2
Arizona........	494,348	9	521,000	9	664,000	11
Arkansas.......	1,086,859	18	1,146,000	18	1,461,000	22
California.....	3,127,750	32	3,307,000	31	4,215,000	38
Colorado.......	920,879	17	971,000	16	1,238,000	20
Delaware.......	53,109	1	57,000	1	73,000	1
District of Columbia......	23,877,104	354	25,299,000	326	28,156,000	361
Florida........	1,075,362	17	1,133,000	17	1,444,000	21
Georgia........	948,393	16	1,009,000	16	1,286,000	20
Hawaii.........	362,132	7	382,000	7	487,000	9
Idaho..........	791,458	14	834,000	14	1,063,000	17
Illinois.......	1,322,878	17	1,395,000	17	1,778,000	21
Indiana........	945,588	16	997,000	16	1,271,000	20
Iowa...........	1,198,429	17	1,288,000	17	1,642,000	21
Kansas.........	1,157,699	16	1,221,000	16	1,556,000	20
Kentucky.......	825,505	14	871,000	14	1,110,000	17
Louisiana......	912,505	11	963,000	11	1,228,000	14
Maryland.......	602,582	9	608,000	9	775,000	11
Michigan.......	1,153,963	18	1,174,000	18	1,496,000	22
Minnesota......	1,233,431	17	1,300,000	17	1,657,000	21
Mississippi....	1,116,469	13	1,177,000	13	1,500,000	16
Missouri.......	1,073,779	17	1,132,000	17	1,443,000	21
Montana........	590,120	10	622,000	10	793,000	12
Nebraska.......	1,156,742	18	1,220,000	18	1,555,000	22
Nevada.........	183,544	4	194,000	4	247,000	5
New Hampshire..	752,018	13	782,000	13	997,000	16
New Jersey.....	462,750	9	488,000	9	622,000	11
New Mexico.....	430,184	8	483,000	8	616,000	10
New York.......	1,141,424	14	1,203,000	14	1,533,000	17
North Carolina.	1,084,929	15	1,144,000	15	1,458,000	19
North Dakota...	804,964	15	849,000	15	1,082,000	19
Ohio...........	934,090	15	956,000	15	1,219,000	19
Oklahoma.......	875,008	13	923,000	13	1,177,000	16
Oregon.........	800,751	13	844,000	13	1,076,000	16
Pennsylvania...	861,357	15	908,000	14	1,157,000	17
South Carolina.	596,280	11	628,000	11	800,000	14
South Dakota...	768,649	13	811,000	13	1,034,000	16
Tennessee......	946,805	13	998,000	12	1,272,000	15
Texas..........	2,041,573	25	2,151,000	24	2,742,000	29
Utah...........	413,333	8	435,000	8	554,000	10
Virginia.......	708,043	12	762,000	12	971,000	15
Washington.....	861,110	13	908,000	13	1,157,000	16
West Virginia..	380,845	7	402,000	7	512,000	9
Wisconsin......	998,454	17	1,052,000	17	1,341,000	21
Wyoming........	458,961	8	484,000	8	617,000	10
Total, Available or Estimate..	63,332,728	954	66,876,000	921	81,151,000	1,096

NATIONAL AGRICULTURAL STATISTICS SERVICE

STATUS OF PROGRAM

The National Agricultural Statistics Service (NASS) administers the United States Department of Agriculture's program of collecting and publishing current national and State agricultural statistics. Statistical data provided by the Service on the Nation's agriculture are essential in making effective policy, production, and marketing decisions.

NASS programs are organized in the following major areas: (1) crop and livestock estimates, (2) statistical research and service, and (3) work performed for others.

CROP AND LIVESTOCK ESTIMATES

Current Activities: Agricultural production and marketing data are collected, summarized, analyzed, and published for a wide range of items including: number of farms and land in farms; acreage, yield, production, and stocks of grains, hay, oilseeds, cotton, potatoes, tobacco, fruits, some vegetables, floriculture, and selected specialty crops; inventories and production of hogs, cattle, sheep and wool, goats and mohair, mink, catfish, trout, poultry, eggs, and dairy products; prices received by farmers for products, prices paid for commodities and services, and related indexes; cold storage supplies; and related areas of the agricultural economy.

Estimates for approximately 120 crops and 45 livestock items are published in over 300 reports each year through the NASS Agricultural Statistics Board (ASB). All information is made available to the public and news media at scheduled release times. A user fee system covers the costs of maintaining mailing lists, printing, and mailing the releases. Survey respondents, news media, congressional offices, and other Federal agencies are not required to pay for ASB releases.

The estimating program is conducted through 45 State Statistical Offices (SSO's) servicing all 50 States. The majority of these SSO's are operated as joint State-Federal offices. The cooperative funding arrangements with State agencies provide additional State and county data to supplement and complement information produced with Federal resources.

Thousands of farmers, ranchers, agribusinesses, and others voluntarily respond to surveys about crops, livestock, and other agricultural activities. These surveys are supplemented by field observations, objective yield counts and measurements, and other data to provide reliable information.

The principal program goals are to: (1) provide data and services needed for commercially important segments of the agriculture industry; (2) provide statistics necessary for informed government policy development and program implementation, especially statistics mandated by law; (3) increase the accuracy, dependability, and public usefulness of national and State data; (4) conduct program reviews to ensure that statistical information is collected and published in an efficient manner and satisfies user needs; (5) minimize the time between data collection and release; (6) improve information distribution; and (7) reduce survey response burden on individuals and firms.

Selected Examples of Recent Progress:

A. Increasing Data Accuracy and Dependability

1. Special Surveys Added to Measure Effects of Excessive Spring Rain. A special monthly survey was conducted in selected States to measure the effects of extensive rainfall during planting time. These special surveys enabled the Agricultural Statistics Board to estimate the amount of acreage not planted due to the excessive rain.

2. Efforts Expanded to Measure and Control List Duplication. Following the 1989 June Agricultural Survey, a special initiative measured the duplication of operations found in both our list and area samples. After the duplication check was completed, survey estimates were regenerated to provide a benchmark for the operational survey.

3. Farm List Maintenance Being Simplified. A new concept is being investigated to simplify the maintenance of the list of farms used for sampling purposes. This procedure will maintain only individual operator names as the sampling unit for all operating arrangements in which the individual is involved. This will avoid keeping up with all the names and combinations of names associated with farms and ranches. This simplified procedure will reduce nonsampling errors associated with surveys.

B. Reviewing Commodity Programs

1. Additional Grain Estimates Prepared. A July 1 forecast of production for spring wheat, oats, and durum wheat was reinstated.

2. Hogs and Pigs Report Expanded. The number of States for which quarterly estimates of hogs and pigs are prepared were increased from 10 to 16 as a result of the new Quarterly Agricultural Survey program.

3. Milk Production Data Improved. Revisions in monthly and quarterly milk production estimates will be prepared on a current basis rather than waiting until end-of-year. This will increase the usefulness of these data to data users for making milk production projections.

4. Coverage Increased for Goats and Mohair Data. Coverage of goat inventory, mohair production, and price estimates was improved by adding four additional States. These additional States increased the coverage of goat inventory and mohair production from 92 percent to 98 percent of the U.S. total.

5. Sheep Estimates Expanded. Production, Disposition, and Income estimates and sheep inventory estimates were expanded from 41 States to all States.

6. Changes to Hatchery Production Program. Modifications were made to the poultry estimating program to provide separate estimates for broiler-type and egg-type layers, rate of lay, and egg production in primary breeders and hatchery supply flocks. This better serves data users and meets specific requests which surfaced at the 1988 Data Users Meetings.

7. New Details on Farm Numbers. A new data series was published that contains State and/or regional estimates of number of farms and land in farms by sales class.

C. Data Handling and User Services

1. Data Users Meetings Held. Six meetings were held in 1989 to obtain feedback on Agency programs and provide detailed information on survey methodology to data users. These meetings also included participants from the Agricultural Marketing Service, Economic Research Service, and World Agricultural Outlook Board in order to provide data users an opportunity to interact with other USDA agencies associated with statistics. The 1989 meetings focused on fruits, vegetables, other specialty commodities, and farm labor and wage rate estimates.

2. Finance Survey Information Distributed Quickly. A four-page master release of State and regional economic data from the 1988 Farm Costs and Returns Survey was distributed to the States to speed up the release of the farm finance information.

3. Subscription Service Initiated. Data users may now subscribe to Agricultural Statistics Board (ASB) reports through a private sector contract subscription service in addition to the Government Printing Office. The subscription service offers the option of single or multiple-year subscriptions for up to three years. In addition, data users may subscribe to reports from both NASS and the Economic Research Service through the same service.

4. Equipment Contract Awarded. A contract to procure microcomputers and local area networks for all field offices was awarded. This will allow standardization of hardware, software, and processing procedures throughout the Agency. Installations are expected to begin November 1989 and continue into Fiscal Year 1992.

5. Summary System Being Developed. A new summary system is being developed to efficiently handle the increasing analysis requirements of probability surveys.

6. Electronic Storage of Published Estimates. An on-line database system has been developed to store all current and historical estimates published by NASS. Eventually, all historical estimates will be loaded to the database, including county estimates.

7. Grain Stocks System Developed. An on-line database system has been developed to assist the ASB in preparing estimates of grain stocks. This is the second phase of a full ASB automation project. The system is an internal information database of survey indications and estimates.

8. Computer Contract Awarded. A new 8-year teleprocessing services contract was awarded to handle all mainframe computer processing activities.

9. Procedures Briefings Expanded. Briefings on Agency sampling, estimation, and security procedures were presented to outside visitors in conjunction with nearly every monthly *Crop Production* report. The agenda was adjusted to provide more details on major procedures. New briefings were set up to cover estimation procedures for *Grain Stocks* and *Hogs and Pigs* reports.

STATISTICAL RESEARCH AND SERVICE

Current Activities: Research is conducted to improve the statistical methods and techniques used to produce agricultural statistics. This research supports the NASS long-range objective for improving the accuracy of agricultural commodity forecasts and estimates at minimum cost. It is directed toward enhancement of forecasting and estimation techniques, data collection techniques using new technology, quality improvement, and statistical process control efforts.

Selected Examples of Recent Progress:

A. Improving Operational Programs

1. Technological Improvements in Satellite Data Collection Promising. Recent improvements to sensors on board earth resource and weather satellites have increased the information content of remotely sensed data, especially for agricultural resources. Data from these sensors are being studied to develop new cost efficient methodologies for crop area estimation and mapping and early season crop condition assessment.

2. Computer-Assisted Interviewing Studied. A pilot project has been instituted to evaluate the cost/benefit and feasibility of using Computer-Assisted Personal Interviewing (CAPI). CAPI involves using lightweight laptop devices to collect data and allows on-the-spot error detection, immediate electronic conversion, and faster data transmission to a central office. Related work includes using computers at the point of collection in objective yield surveys to record and transmit counts and measurements.

3. Focus on Editing Techniques and Systems. Statistical methods have been developed for reviewing livestock slaughter data and may be expanded for use on other agribusiness surveys. Additionally, research on interactive editing using microcomputers is being conducted to detect suspicious survey data. A project is also underway to evaluate a Computer-Assisted Telephone Interviewing (CATI) instrument which will use previously reported data as an edit check during grain stocks surveys.

4. Research Underway Involving Estimation. Research to identify or develop estimators to improve hog and soybean estimates is being done in cooperation with Oregon State University. Time series analysis is being investigated for use in preparing estimates of prices received for farm commodities. Research into new estimators is also underway for use in county level estimates.

5. Quality Improvement and Assurance Efforts. An Agency quality assurance team has been formed to identify, define, and collect needed information on the relevance, timeliness, resources, and accuracy dimensions of a survey. Research in this area will involve developing a comprehensive error source profile and exploring graphic techniques to chart these errors, estimating statistical bias, and estimating nonsampling error variance components of survey statistics.

B. Statistical Consulting and Services

1. Assistance to the Animal and Plant Health Inspection Service (APHIS). Advice was provided to APHIS regarding the survey design of the National Swine Health Monitoring System.

2. Human Nutrition Information Service (HNIS) Assisted. Consulting assistance was provided in designing and analyzing HNIS longitudinal food consumption surveys. This included increasing sampling design efficiency, reducing nonsampling errors, and using sound statistical methods.

PASSENGER MOTOR VEHICLES

The 1991 Budget Estimates propose the replacement of 3 passenger motor vehicles.

The passenger motor vehicles of the National Agricultural Statistics Service are used (where common carrier or GSA vehicles are not feasible) for necessary field travel in carrying out the mission of the agency. All passenger motor vehicles are located at various field offices.

Replacement of passenger motor vehicles. Replacement of 3 of the 14 vehicles now in operation is proposed. These 14 vehicles are located in 13 field locations and are necessary to meet the transportation requirements inherent in carrying out the agency's program. The vehicles proposed to be replaced will have passed the minimum replacement standards of 6 years of age or 60,000 miles prescribed by the General Services Administration.

Age and mileage data for motor vehicles on hand as of September 30, 1989, are as follows:

Age-Year Model	Number of Vehicles	Percent of Total	Lifetime Mileage (thousands)	Number of Vehicles	Percent of Total
1984 or older	2	14	80-100	0	0
1985	4	29	60-80	3	21
1986	1	7	40-60	3	21
1988	3	21	20-40	3	21
1989	4	29	Under 20	5	36
Total	14	100	Total	14	100 a/

a/ Column does not add because of rounding.

MONDAY, FEBRUARY 26, 1990.

WORLD AGRICULTURAL OUTLOOK BOARD

WITNESSES

BRUCE GARDNER, ASSISTANT SECRETARY FOR ECONOMICS

JAMES R. DONALD, CHAIRPERSON

GERALD A. BANGE, DEPUTY CHAIRPERSON

NORTON D. STROMMEN, CHIEF METEOROLOGIST

RICHARD C. McARDLE, REMOTE SENSING COORDINATOR

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Mr. **WHITTEN**. Next we have Mr. Donald of the World Agricultural Outlook Board.

Mr. **DONALD**. Thank you, Mr. Chairman.

I appreciate, too, this opportunity to discuss the World Agricultural Outlook Board's budget proposal for fiscal year 1991. Mr. Chairman, with your permission, I would like to make a few overview comments and have my statement placed in the record.

I would like to discuss briefly, in one minute basically, what the World Board is all about and how we go about doing things.

Mr. **WHITTEN**. You are going to discuss the whole world situation in one minute? I congratulate you. I don't know whether we will understand it.

SUMMARY STATEMENT

Mr. **DONALD**. Mr. Chairman, we have two basic responsibilities. First, we are trying to put together these world crop production estimates like a crop reporting board.

Mr. **WHITTEN**. Are you going to weigh these estimates in favor of foreign countries or the United States?

Mr. **DONALD**. We will do neither. The other function is to take production estimates and look at these balance sheets. We are responsible for putting together supply-demand balance sheets for the United States and for countries around the world. It is an economic analysis that we are involved in.

Mr. **WHITTEN**. A few years ago, we had a witness on your side of the table testify that he tried to make farmers from the Midwest submit accurate figures. These farmers wouldn't tell the Board the truth so they wanted us to make them tell the truth.

Mr. **DONALD**. Most producers do tell the truth.

Mr. **WHITTEN**. But, to the head of this organization, the farmers weren't telling him the full story.

Mr. **DONALD**. We have heard that.

Mr. Chairman, the Board is a small agency. Basically, we operate with the other agencies in the Department, and we carry out these functions through the commodity estimates committees, interagency committees that put together the Department's official supply and demand estimates.

The second area of responsibility is weather and climate. We chair weather and climate activities across the Department. Also a critical part of our work is through the Joint Agricultural Weather Facility that we operate in cooperation with NOAA. That is the focal point within the Department for doing these weather crop assessments.

The third area that we work with other agencies is in the remote sensing. We coordinate those activities for the Department. The weather and remote sensing are in support of global production estimates.

BUDGET REQUEST

Let me discuss the budget increase, if I could now, Mr. Chairman. We are asking for increases in the three areas that I just talked about, in the weather, the remote sensing and the commodities.

Dr. Gardner has done an overview and has captured the essence of what we are trying to do. In the weather area, we need access to additional weather information which will help us do a better job of assessing and monitoring weather's impact on crops.

Additional things can be done in terms of tapping into the statistics and getting additional information on a more timely basis, Mr. Chairman.

The second area I would like to just mention is the area of handling World Board weather information. We have some equipment that needs to be replaced. We need modern technology to handle the weather data as well as the economics and the remote sensing data. So we are requesting funds in that area.

We are short of money in that area to replace equipment. Also, in order to better manage the data base, we are requesting an additional position. This improved weather data will help us better utilize our global and U.S. weather-crop data, and we use these data in terms of the impact of freezing, or drought on crops.

I am reminded of last year, when we had so much difficulty with the hard red winter wheat crop. We had numerous briefings with the House and Senate Agriculture Committees, in terms of what drought meant for disaster assistance to producers.

On the remote sensing, we need to do a better job of monitoring and coordinating those activities, so I am asking for funds in that area.

Mr. Chairman, that concludes my remarks. I will be happy to respond to any questions.

[CLERK'S NOTE.—Mr. Donald's statement appears on pages 126 through 133. The explanatory notes appear on pages 134 through 144.]

GOVERNMENT POLICIES

Mr. WHITTEN. Thank you for your presentation. On this side of the table I can't help but rely on what we have learned through the years. I think you have done a reasonably good job, all things considered, but I don't see how you can give us estimates we can count on as long as we have an open door policy that allows unlimited products to enter the country. As many as 640 truckloads of farm commodities came across into the United States from Mexico at one border crossing in one day.

Agriculture is our largest industry and the Department has failed to protect it. This country's decline in the agricultural economy is largely responsible for the $3 trillion debt we are facing now. So you have to ask who is going to promise what to whom. We will have to wait and see what is passed in the way of a farm bill.

For years the farmer received a fair price for his products from the folks he sold them to. Now he sells them at low cost and depends upon a check from the U.S. Treasury at a time when we have limitations on what the Congress can propose. We think you have done a good job but I don't think we can rely on any estimates you have as to benefits as long as imports continue to come in in competition with our domestic market.

The economic problems we face are not limited to agriculture, but agriculture is one area where we pay people to quit producing. I don't see how any country can expect to pay a debt without producing more than they need and selling the surplus to folks that want it. The record shows that every country except ours sell what they have and don't need for what it will bring. We have testimony stating that over 100 countries need food and clothing and we are sending them guns and ammunition instead. Some years ago the Commodity Credit Corporation was set up to support prices and retain our world markets. This was done knowing that the American farmer had his cost built up by increases in the cost of labor and industry had a right to sell for whatever the traffic would bear. In addition to CCC, they also set up section 32 where thirty percent of the import duties are set aside to support prices to offset the high domestic cost of production that we had and to sell at such prices as to retain our share of the world markets.

That worked for 48 years, but within the last ten years, the Department quit using these programs. Instead, we're paying farmers not to produce, and giving our competition to other folks.

The Secretary is one of the ablest men I know, but he doesn't seem to realize that foreign countries trump up reasons to keep our stuff out. For example, England prohibited the import of cattle from the United States on account of hoof and mouth disease. They had it, and we didn't. But when you get rid of one obstacle they will put up another because their purpose is to protect their own industry, which we refuse to do for our folks.

EXPORT POLICIES

Years ago we had over $10 billion of commodities in the hands of the Commodity Credit Corporation and pressures wouldn't let them sell it. We had a $25 billion corporation. We had everything except the means to sell what they had, so we set up a sales manager. They let him do everything in the world except sell. That is what CCC was created for.

We had one of our friends from Oregon retire because they wouldn't pay attention to his efforts to sell like other folks do.

I took this up with the Secretary while he was here. He was representing the President when he went to Poland not the Department of Agriculture—nobody is expecting him to be over there representing foreign countries.

I think you have done the best you can under the circumstances but I don't think you can give us an answer. My trial lawyer training says don't ask a question unless you know the answer. I know the answer, and I know what we have done is not working.

When you have a $3 trillion debt, you better start producing more than you need if you want to handle that debt. It is not just you—we as a nation have opened the gates to everything foreign. Most of the big city states of the past went under when they forgot where their real wealth came from. I know you are doing the best you can, but the places we can't touch are the places we can't do anything about.

Your request includes an increase of $184,000 to purchase, lease, install and maintain a weather information system. What will you purchase and what will you lease?

AGRICULTURAL WEATHER SYSTEMS

Mr. **Donald**. We need to purchase equipment that would: replace an aging machine for receiving weather data with a new one that will expand coverage of precipitation and other weather events and allow us to receive high resolution pictures and make high quality charts; replace obsolete equipment that will permit us to receive, process and reproduce additional domestic and international data from the National Weather Service; and, permit us to access sophisticated analytical products from other sources.

We need to lease upgraded equipment that would: permit us to better monitor weather developments on a more timely basis, both domestically and internationally; permit us access to high technology products from the National Weather Service which cannot be received on our present equipment; and allow us to reproduce high quality charts for briefings and publication.

Mr. **Whitten**. How will this weather information system be different from other systems being used to provide weather information, such as that from the National Weather Bureau? How will the information received from this system differ from information received through the Joint Agricultural Weather Facility?

Mr. **Donald**. This weather information system will increase our accessibility to the basic family of products produced by the National Weather Service, provide rapid retrieval of data products for surveillance, allow greater use of basic weather data for regional analysis, and, permit high quality reproduction of products for briefings and exports. This system would provide the Joint Agricultural Weather Facility with the capability to employ state-of-the-art technology to improve the timeliness and quality of agricultural weather assessments.

Mr. Whitten. Please provide a breakout of purchase, leasing, installation and maintenance costs.

Mr. Donald. I will provide, for the record, a breakout listing whether the item is purchased or leased, and any associated itemized costs for installation or maintenance.

[The information follows:]

Item	Purchased	Leased	Installation	Total
Digital Direct Readout Ground Station and Enhancement Package	$88,000		$2,000	$90,000
Computerized Display System and Micro-Earth Station Upgrade	13,500		500	14,000
Weather Satellite Interaction Display System		$25,860		25,860
Weather Information System		24,480		24,480
Data Delivery System	17,500	12,160		29,660
Total	119,000	62,500	2,500	184,000

METEOROLOGICAL DATA BASE EXPANSION

Mr. Whitten. Please explain in some detail how your meteorological data base expansion will enhance the information you now receive and report.

Mr. Donald. The Joint Agricultural Weather Facility conducts an ongoing effort to expand the domestic and foreign meteorological data bases for monitoring and assessment. Weather and crop conditions show considerable variation over producing areas during the growing season. Thus, yield estimates will be improved by use of data for crop reporting districts or county levels for domestic analysis and comparable regional levels for foreign yield assessments. The quality of the data also needs to be examined carefully. In addition to basic temperature and precipatation data which are most readily available, this effort will enhance computation of additional data variables such as vapor pressure deficit, evapotranspiration, growing degree days, crop development stages, and moisture and heat stress indices. This information will improve the monitoring and analysis program.

REMOTE SENSING ACTIVITIES

Mr. Whitten. Part of your requested increase of $109,000 will be used for a remote sensing inventory. Do you still plan to contract out for this? Will you maintain the inventory once completed? What will the annual cost be to maintain the inventory?

Mr. Donald. It is our intention that the remote sensing inventory be prepared by contractor with the assistance of and under the direction of a World Board staff member. Also, tentative plans call for annual updating of the inventory. It is estimated that annual maintenance of the inventory, which will be performed by a World Board staff member, will cost about $3,000.

Mr. Whitten. Please describe the activities of the Remote Sensing Coordination Committee. What USDA agencies make up the Committee?

Mr. Donald. The USDA Remote Sensing Coordination Committee was created to: establish and maintain communication among USDA agencies concerned with remote sensing; identify and coordinate USDA remote sensing data needs; provide advice on Departmental remote sensing policy; and coordinate remote sensing activities with the work of the USDA Weather and Climate Program Coordinating Committee.

Fourteen USDA agencies designate members to the Committee. They are the Agricultural Stabilization and Conservation Service; Animal and Plant Health Inspection Service; Agricultural Research Service; Cooperative State Research Service; Economic Research Service; Federal Crop Insurance Corporation; Foreign Agricultural Service; Forest Service; National Agricultural Statistics Service; Office of Budget and Program Analysis; Office of Information Resources Management; Office of International Cooperation and Development; Soil Conservation Service; and World Agricultural Outlook Board.

Mr. WHITTEN. You state that USDA-wide remote sensing activities total $23 million. Would you break that figure down by agency along with a brief description of what each agency is doing?

Mr. DONALD. Funding for the remote sensing activities of the USDA in fiscal year 1990 is distributed as follows: National Agricultural Statistics Service, $1.80 million; Agricultural Research Service, $2.96 million; Cooperative State Research Service, $0.62 million; Foreign Agricultural Service, $2.79 million; Forest Service, $3.00 million; Soil Conservation Service, $4.72 million; Agricultural Stabilization and Conservation Service, $7.37 million, and World Agricultural Outlook Board, $0.10 million.

Remote sensing activities in USDA can be categorized under two broad headings: Research and Operations. The Agricultural Research Service is engaged in a broad-based program to test and develop applications of remotely sensed data to meet the information needs of other USDA agencies. Funding for remote sensing research, primarily at land-grant universities, is passed through the Cooperative State Research Service. Remote sensing research in the National Agricultural Statistics Service is focused on development of procedures and methods for the use of data from advanced satellite systems, for example, Landsat 6 to be launched in 1991.

The Forest Service and Soil Conservation Service use remotely sensed data, from aircraft and satellites, for a variety of information needs related to resources management, such as forest and soils mapping, timber management, conservation planning, and management of wildlife habitat.

The Foreign Agricultural Service uses data from the Landsat satellites and from polar orbiting weather satellites as a source of information for monitoring growing conditions in major agricultural regions of the world. The Agricultural Stabilization and Conservation Service uses aerial photograph to check local compliance with farm programs and is in charge of the Department's Aerial Photography Field Office Air Photo Laboratory located in Salt Lake City.

ADP MAINTENANCE AND REPLACEMENT

Mr. WHITTEN. Please describe your "lockup reports".

Mr. **Donald**. They are reports prepared under tight security and released at 3:00 p.m. EST after cash and futures commodity markets close to prevent any person from profiting from leaked information. They include the World Agricultural Supply and Demand Estimates report issued by the World Agricultural Outlook Board, as well as the monthly Crop Production report and other crop reports on speculative commodities issued by the National Agricultural Statistics Service.

Federal law and USDA regulation stipulate harsh penalties for employees who divulge information prematurely. While reports are prepared, rigorous security is enforced by cutting off telephones, sealing windows and literally locking up those preparing the report behind double steel doors and armed guards, hence the popular designation of "lockup reports."

Mr. **Whitten**. Please provide a breakdown of what will be purchased with the increase you requested for ADP maintenance and replacement.

Mr. **Donald**. During 1983 and 1984, to minimize the potential for missing a deadline due to machine failure during lockup, the Board decentralized from a single mini-computer to a micro-computer based system. These micro-computers with printers, are still in use today. Five units are obsolete, subject to frequent failure, and must be replaced with modern machines. The average replacement cost per unit is estimated to be $8,000.

CFTC-USDA AGREEMENT

Mr. **Whitten**. Please describe in some detail the formal CFTC–USDA agreement. How long will this agreement last?

Mr. **Donald**. The CFTC–USDA agreement formalizes interagency liaison, i.e., information exchanges, between the two agencies. The agreement has three key parts. First, designated USDA representatives attend CFTC price surveillance briefings for the purpose of presenting an analysis of the market outlook for the agricultural commodities under consideration. USDA is furnished with the weekly agenda, one day prior to the surveillance meeting. Second, it calls for USDA to provide CFTC with an in-depth briefing of current agricultural market developments and for CFTC to advise USDA about significant developments in agricultural commodity futures markets. Third, either agency initiates alerts about special developments, such as program changes by USDA or rule changes by CFTC, that potentially impact markets.

This agreement will continue in its present form until such time as improvements are recommended by either agency. Information-sharing procedures under this agreement are working quite well and no changes are envisioned at the present time.

Mr. **Whitten**. What part of your 1989 budget was expended on this agreement? How much did CFTC contribute?

Mr. **Donald**. WAOB expended about $3,600 of its 1989 budget servicing this agreement. No funds are transferred between CFTC and USDA with respect to this agreement.

INTERAGENCY AGRICULTURAL PROJECTIONS COMMITTEE

Mr. **Whitten**. Please describe the work being done by the Interagency Agricultural Projections Committee.

Mr. **Donald**. The Interagency Agricultural Projections Committee, IAPC, is a coordinating group with responsibility to insure that the best expertise and analyses of the agencies are incorporated into the Department's long-term projections work. It serves a review and oversight function, including development of analytical assumptions on the general economy and specific commodity programs. The IAPC reviews analytical results for internal consistency and accuracy. Long-term commodity and farm sector projections coordinated by the IAPC are used internally by the Department for budget and program analysis purposes.

Mr. **Whitten**. Your explanatory notes state that the Committee was staffed with a full-time coordinator. From what agency did this coordinator come and who pays his/her salary?

Mr. **Donald**. The coordinator is from the Foreign Agricultural Service, which is paying his salary.

Mr. **Whitten**. How much of your 1989 budget was used to fund this Committee?

Mr. **Donald**. In 1989, budget expenditures by the WAOB in direct support of this Committee totaled $348 for travel.

SUPPLIES AND MATERIALS

Mr. **Whitten**. Please explain the decrease of more than 50 percent in the Supplies and Materials object class.

Mr. **Donald**. In fiscal year 1988, higher than normal ADP and office supplies were needed as a result of large equipment purchases in the preceding fiscal year. In fiscal year 1989, supply needs returned to a normal level.

OTHER SERVICES

Mr. **Whitten**. Please explain the decrease of $83,683 in Other Services from last year's 1989 estimate to this year's 1989 actual.

Mr. **Donald**. The decrease in fiscal year 1989 Other Services resulted from purchasing less meteorological and remote sensing data. Funds were used to cover higher operating costs, promotions, within-grade increases, merit pay base increases, FERS increases, support services increases, and to absorb a Congressional operating cost reduction from the previous year.

Mr. **Whitten**. Why do you expect the Other Services account to more than double from fiscal year 1989 to fiscal year 1991?

Mr. **Donald**. The World Board Other Services account doubles from fiscal year 1989 to fiscal year 1991 as a result of its fiscal year 1991 new budget initiatives of $63,000 for improvement of agricultural weather information systems, $20,000 for ADP maintenance and replacement, $55,000 for economic and meteorological data base, $1,000 for ADP management support, and finally $21,000 of central Department support increases and higher operating costs.

Mr. **Whitten**. Please provide a sub-object class breakdown for the Other Services account for fiscal years 1989, 1990 and 1991.

Mr. **Donald**. I will provide that information for the record.

[The information follows:]

OTHER SERVICES (OBJECT CLASS 25)

[In thousands of dollars]

Service	1989 actual	1990 estimate	1991 estimate
Commodity news services	18	18	18
Central Departmental support	19	30	30
Training	5	6	6
Equipment maintenance	4	6	6
Arts and graphics	4	5	5
National Academy of Sciences study	30	30	30
Other agreements and contracts	39	42	42
Miscellaneous	26	29	29
New initiatives:			
Improve weather agricultural information systems	0	0	63
ADP maintenance and replacement	0	0	20
ADP management support	0	0	1
Economic/meteorological data base	0	0	55
Total	145	166	305

EQUIPMENT

Mr. **Whitten**. Why are your equipment expenses expected to increase by $178,000 in fiscal year 1991?

Mr. **Donald**. Equipment expenses increase by $178,000 in fiscal year 1991 over fiscal year 1990 for three budget request initiatives. First, $119,000 is needed to improve operation of agricultural weather information systems, $40,000 for ADP maintenance and replacement, and $19,000 for economic and meteorological data base.

Mr. **Whitten**. Please provide a sub-object class breakdown for the Equipment account for fiscal years 1989, 1990 and 1991.

[The information follows:]

EQUIPMENT (OBJECT CLASS 31)

[In thousands of dollars]

Equipment	1989 actual	1990 estimate	1991 estimate
ADP equipment	45	45	45
Office machines	2	5	5
Noncapitalized equipment	4	4	4
Miscellaneous	4	1	1
New initiatives:			
Economic/meteorological data base	0	0	19
Improve weather information systems	0	0	119
ADP maintenance/replacement	0	0	40
Total	55	55	233

PERSONNEL-RELATED

Mr. **Whitten**. Last year's budget request included the addition of one economist and one meteorologist. Was either position filled? If not, why?

Mr. **Donald**. The fiscal year 1990 budget proposed addition of one economist and one meteorologist has not yet been filled. Funds for these positions were needed to cover full absorption of the fiscal year 1989 pay costs, promotions, merit pay base increases, within-grade increases, increased operating costs, and to absorb the Gramm-Rudman reduction.

Mr. WHITTEN. Your staff year ceiling in fiscal year 1990 is 32. Your 1989 actual was 28. Could one of these four unfilled staff years be used to provide for ADP mangement support?

Mr. DONALD. No, we do not have adequate funding. Since the World Board is such a small agency, it does not have the flexibility to continually absorb reductions and to fund increasing operating and personnel costs. As a result, in fiscal year 1990, the Board can only fund 28 of its ceiling of 32 staff-years. Funds will be used to meet salary and increased operating costs, and to absorb the fiscal year 1990 Gramm-Rudman reduction.

GLOBAL CHANGE INITIATIVE

Mr. WHITTEN. Please explain in some detail what was involved in the international and domestic government-wide effort related to global climate change. What international scientific bodies did you advise? Will you be involved in this initiative in fiscal year 1991? If so, how?

Mr. DONALD. The Global Change initiative was developed under the direction of the Committee on Earth Sciences, CES, of the Office of Science and Technology Policy, OSTP. The objective of this initiative is to provide a sound scientific basis for risk assessments and policy options related to the global change. Within USDA, the World Board, in cooperation with the Science and Education Administration, coordinates an interagency review of current research programs aimed at identifying areas of omission and recommending research needed to fill the voids in our current understanding of global change. The initiative is outlined in the "Our Changing Planet: A U.S. Strategy for Global Change Research." It was forwarded to Congress as part of the President's FY 1990 budget package.

The Inter-governmental Panel on Climate Change, IPCC, work is being done as a cooperative effort by the World Meteorological Organization, WMO, and the United Nations Environmental Program, UNEP. The initial report of the IPCC will be completed by September 1990. It will focus on these aspects of climate change, i.e., the science, the impacts and response strategies. The United Kingdom is the chair for the work group on "Science," which will detail the status of our current understanding about global climate change and the weaknesses in the knowledge base. The USSR is the chair for the work group on "Impacts", which will provide initial estimates of potential impacts on sectors such as food production, water supplies, and energy uses. The United States is the chair for the work group on "Response Strategies" which will outline some possible responses to limit emission and/or adapt to the potential changes outlined by the Science Work Group. The U.S. IPCC work is being guided by the Department of State with the support of other Federal agencies. The initial results of the IPCC work will be released at the Second World Climate Conference from October 29–November 7, 1990 in Geneva, Switzerland. It is probable that the IPCC will continue working in FY 1991.

In addition to the work on the CES and IPCC, Dr. Strommen represents the United States on a NATO Science Advisory Committee on Global Climate Change and the WMO's Commission for Agricultural Meteorology. The Global Change and Global Climate Change planning, monitoring and research activities will continue in FY 1991 and subsequent years.

WORLD AGRICULTURAL SUPPLY AND DEMAND ESTIMATES

Mr. WHITTEN. Please provide for the record a copy of the most recent monthly report of the World Agricultural Supply and Demand Estimates.

[CLERK'S NOTE.—The full document is too lengthy to be reprinted. A copy has been retained in Committee files.]

Mr. WHITTEN. What is the estimated annual cost of this publication?

Mr. DONALD. The current annual cost to produce the World Agricultural Supply and Demand Estimates is $8,000, comprised of $3,000 for postage fees, $2,000 for contractual mailing services and $3,000 for printing.

Mr. WHITTEN. Mrs. Smith?

WORLD GRAINS, SUGAR, AND LIVESTOCK PRODUCTION

Mrs. SMITH. Welcome to everybody. We are glad to have all of you here.

I will start with you, Mr. Donald—I liked what you said about summarizing what you are doing on the world global program in one minute.

We hear a lot of predictions about the quality of the crops in South America this year. What is your prediction of the World's production of grains, sugar and livestock?

Mr. DONALD. Let me mention soybeans first, since they are important in South America. They are just being harvested now and if we add together what crop we see in Argentina and Brazil, acreage is going to be up a bit. In Argentina if we get better yields, we are going to see a record soybean crop coming out of South America. That is likely to happen.

Corn has not done as well in Argentina. They had some difficulties in January. There were two different times when real hot weather cut into that corn production at a critical pollination time, so the corn crop is not doing as well down there.

If we look at the world, Mrs. Smith, on wheat, the production is going to be up this year. Worldwide production is going to be up. The amount of wheat that will move into export is going to be up. The Canadians have a bigger crop. They really got hurt a year ago. The Canadian crop is back, the European Community is going to have a bigger crop. For sugar, global production will be up but remain below use, while world meat production will move up with larger U.S. poultry output.

If we look into the trade side now, overall wheat trade is going to be up a little bit even though the Soviets have a bigger wheat crop and they are going to import less. Our share of that trade is going to come down mainly because of the recovering crops that I mentioned.

On corn, demand is real good this year. Exports are going to be up. We are going to reduce our corn carryover approximately a fourth.

We are going to reduce our wheat carryover maybe by a third, so that is basically the grains situation.

Even though we will export more soybeans from this country, South America will probably increase more than the U.S. Therefore we are going to add to our soybean stocks in contrast to the wheat and the feed grains, or corn, where we will be pulling those stocks down.

OUTLOOK OF EASTERN EUROPE AGRICULTURE

Mrs. SMITH. With the dramatic changes that are occurring in Eastern European countries, what impact will it have on agriculture in the next few years?

Mr. DONALD. We are still trying to figure that one out. In terms of assistance and in terms of commercial buying, our exports of grain, particularly of corn, have picked up to those countries. Also, we have shipped some chicken parts to those countries as you know. In the longer term, we are still trying to figure that one out. There is a big effort in Eastern Europe to sell those countries more soybeans, to get their broiler industry, for example, off the ground. So perhaps there is some potential there in terms of shipping them soybeans or soybean meal, but we have still not gone through all the analyses to know that is going to happen there.

Mrs. SMITH. I appreciated your comments about the weather information and you wanting to spend much of your increased funding to update agricultural weather information. I think that is very important. Let me mention that you said that was a 26 percent increase. The last people we had testify before us wanted a 15 percent increase.

Also a follow-up, Mr. Donald, on your conversation with Mr. Smith. From what you said—well, let's put it a different way. Farmers have been out signing up for the feed grains program, and they can apply for the right to use up to 25 percent of their permitted acres on soybeans, and that period of time for signing up was—expired February 16th.

The Department now, the Secretary has to come out with a decision soon as to whether it will be no less than 10 percent or a maximum of 25 percent. Are you involved in that?

Mr. DONALD. Mr. Smith, the interagency committee that the board chairs will be looking at those supply-demand balances. Looking at the projected prices. Yes, we will be involved in that.

Mr. SMITH. You will be or you have been? Do you know when the results will be known?

Mr. DONALD. No, I do not know whether it will perhaps be—I will check that for the record, Mr. Smith. It will probably be at least a couple of weeks, Dr. Gardner, before that information is available?

Mr. SMITH. I see. Is there a timetable as to when the Secretary will announce it?

Mr. GARDNER. There is no specific timetable that I know of, but we try to do it quickly, and now, as you say, the sign-up is over so we should be getting the data on sign-up very soon now, and then it is just a matter of a week or two.

Mr. SMITH. You have been waiting for the data on the sign-up?

Mr. GARDNER. Yes. We should not have to wait very long, but the sign-up just ended, as you say.

Mr. SMITH. Okay.

Thank you. That is all, Mr. Chairman.

Mr. WHITTEN. Thank you very much.

WORLD AGRICULTURAL OUTLOOK BOARD

Statement of James R. Donald, Chairperson, before the House Subcommittee on Rural Development, Agriculture and Related Agencies.

Mr. Chairman and Members of the Committee, it is my pleasure to appear before you today to discuss the fiscal year 1991 budget request of the World Agricultural Outlook Board.

Overview

The World Agricultural Outlook Board (WAOB) plays a critical role in the U.S. Department of Agriculture's (USDA's) ongoing effort to ensure that its commodity information system responds to today's rapidly changing world agricultural sectors. The purpose of the WAOB is twofold: to provide the most accurate, objective, and timely economic intelligence on worldwide developments which influence U.S. agriculture; and to speed the flow of that information to producers, consumers, policymakers and the general public.

WAOB's main function is to coordinate and review for accuracy and consistency all USDA estimates and analyses relating to international and domestic commodity supply and demand conditions. WAOB maintains liaison with international organizations, such as the World Meteorological Organization, and domestic agencies, such as the Commodity Futures Trading Commission.

WAOB is the Department's focal point for weather and climate information and weather-based impact assessments; these monitoring and analytical activities within USDA are coordinated by the WAOB Chairperson. Remote sensing activities in USDA also are coordinated by the WAOB Chairperson. Weather assessments and remote sensing activities are directed at improving the accuracy and timeliness of crop estimates.

Specific Functions and Progress

WAOB chairs the Interagency Commodity Estimates Committees (ICEC's) and seeks to assure that information from both domestic and international sources are fully integrated into the analytical process. The ICEC's are composed of representatives from the Economic Research Service (ERS), Agricultural Stabilization and Conservation Service (ASCS), Foreign Agricultural Service (FAS), Agricultural Marketing Service (AMS), and WAOB. All committee members are USDA professionals with responsibility for developing official estimates of supply, utilization, and prices for the major agricultural commodities. It is through these committees that the various USDA agencies work together in a coordinated effort. Development and use of new analytical tools and evaluation of forecasting performance are ongoing responsibilities of each committee.

Weather, as much as any economic or policy development, continues to be a significant variable underlying agricultural production and prices. Consequently, USDA places a high priority on incorporating weather-based assessment information into all analyses. The focal point for this activity is the Joint Agricultural Weather Facility (JAWF), operated jointly by the WAOB and the National Oceanic and Atmospheric Administration (NOAA). This facility, located in the South Agriculture Building, continually monitors and assesses global weather events and their probable impact on agricultural output. JAWF briefings, reports and special alerts are key inputs to the development of USDA crop yield estimates.

The Weekly Weather and Crop Bulletin and electronic networks are the principal means used by JAWF to disseminate meteorological assessments to the public. JAWF's early warning capability diminishes the likelihood that USDA policymakers, farmers and other participants in the agricultural system will be caught unaware of a foreign crop failure or some other significant global weather-related event. The Weekly Weather and Crop Bulletin is widely recognized as a prime source of reliable domestic and international crop and weather information.

The World Agricultural Supply and Demand Estimates report (WASDE) is published by WAOB. WASDE is a monthly report which is released on the same day as the U.S. Crop Production report. WAOB has tailored this report to respond to user needs for global crops and domestic livestock situation and outlook information on a timely basis. WASDE presents aggregated global supply and demand data for all major agricultural commodities as well as detailed production, trade, utilization and stocks forecasts for the United States and for principal U.S. competitors and foreign importers.

WAOB recognizes the need for rapid information dissemination. Increasingly, improved technologies are being used to speed the flow of information. The principal objective is to place the World Agricultural Supply and Demand Estimates report into the hands of farmers and other users as quickly and effectively as possible. WASDE is now transmitted electronically upon release at 3 p.m. to a central USDA system that can forward it to all interested users, greatly broadening the potential for report dissemination. Also, the report summary is now being sent electronically to our embassies and trade offices around the world to keep U.S. agricultural attaches, counselors, and trade representatives current with the very latest information on U.S. supplies and prices.

The Agricultural Statistics Board (ASB) of the National Agricultural Statistics Service (NASS) and the WAOB are co-located in a single lockup facility to maximize security conditions for analysis, compilation and release of world crop data and supply/demand estimates. This physical arrangement with the ASB facilitates interaction between domestic and international analysts.

Recent Activities

WAOB continued to publish the monthly World Agricultural Supply and Demand Estimates (WASDE) report which presents estimates of global supply and use for grains, oilseeds and cotton and U.S. supply and use estimates for red meat, poultry, eggs and milk.

The Joint Agricultural Weather Facility (JAWF), operated by the WAOB and the National Oceanic and Atmospheric Administration, continued to jointly publish with NASS the Weekly Weather and Crop Bulletin (WWCB). The WWCB summarizes global weather developments and assesses the potential impact of these events on agricultural production.

For example, the WAOB continued to devote full-time staff and technical resources to monitoring current weather conditions in the USSR to provide USDA with early warnings concerning potential impacts on crop yields. In 1989, the Board's Soviet weather analyst documented favorable conditions for spring wheat establishment in May. However, a drying trend was detected during June, and hot, dry weather intensified in July as the crop advanced into reproduction, leading to reductions in yield potential. As a result of these timely assessments, recommended yield reductions were incorporated into USDA July and August production forecasts and were later confirmed by autumn harvest reports.

In the United States, adverse weather affecting the 1989 crop of winter wheat in the central and southern Plains, varying from extreme drought to plant-killing freezes, brought an unprecedented early-season need for information by the Secretary's office to deal with policy and program issues raised by farmers and the Congress. The Board's Chairperson and Chief Meteorologist prepared and presented some 50 papers related to the drought and the commodity outlook to Government and industry groups. Numerous briefings were provided to Senate and House Agriculture committees and subcommittees.

Among spring-planted crops, the early onset of unfavorable weather conditions precluded using trend yields to develop July crop production estimates. Rather, potential yields were modified to reflect the impact of weather. Under the Board's leadership, USDA weather and commodity analysts evaluated the drought's impact on spring crops by employing resources from within USDA and across the country. This evaluation process strengthened the analytical framework for making early-season improved crop yield estimates.

The Department's Interagency Agricultural Projections Committee (IAPC), under leadership of the Board, undertook a concerted effort to improve USDA's longer-term commodity estimates. These projections underlie the President's budget and serve as a base for analyzing farm program options. The IAPC provided sound and consistent economic and program assumptions to all Interagency Commodity Estimates Committees prior to the development of commodity projections for the President's budget and the mid-session update.

WAOB coordinated and prepared testimony for the House Committee on Science, Space and Technology (Subcommittee on Natural Resources, Agriculture, Research and Environment) regarding use of satellite remote sensing data in USDA and the implications for agricultural production assessments in the event Landsat data would no longer be available. The Board's remote sensing coordinator served as USDA's technical representative to a Landsat Working Group charged with developing options for funding and assigning responsibility for the Landsat program.

The Board assisted the Department in responding to mounting demands for global change research. WAOB worked with the Economic Research Service, Agricultural Research Service, Forest Service, Soil Conservation Service, and Cooperative State Research Service to develop USDA's input to a national research plan. As a result of this effort, USDA provided valuable input to "Our Changing Planet, A Strategy for Global Change Research" which was submitted with the President's fiscal year 1990 budget and further refined for submission with the fiscal year 1991 budget.

USDA and the Commodity Futures Trading Commission (CFTC) continued to share market information. USDA economists formally participated in CFTC's weekly closed market surveillance briefings. This price monitoring activity is coordinated by the WAOB.

WAOB coordinated and directed USDA's 66th Annual Outlook Conference (November 28-30, 1989.) Approximately 100 speakers and 1,200 registrants participated in the 2-1/2 day program which focused on a wide variety of agricultural issues. The Conference was extremely well-received, featuring a sound program and outstanding speakers. Conference coverage was the most extensive ever, with a number of sessions televised to a national audience.

Budget Request

Our total budget request for fiscal year 1991 is $2,404,000. This represents an increase of $494,000 from the fiscal year 1990 level of $1,910,000. This increase consists of $184,000 for improved operation of agricultural weather information systems, $109,000 for economic and meteorological data base expansion and a remote sensing inventory, $86,000 for ADP maintenance and replacement, $38,000 for data management support, and a total increase of $77,000 for restoration of the FY 1989 pay costs ($43,000) and FY 1991 pay costs ($34,000).

Funding is needed to purchase, lease, install, and maintain an improved agricultural weather information system. This system will provide the capability for rapid data retrieval, surveillance, and generation of high quality data and analysis to depict pertinent information for dissemination through briefings and releases.

For the data base improvement and remote sensing inventory areas, funds are needed to: expand coverage and prepare improved early-season crop yield assessments for the United States and for special analyses of weather's impact on U.S. commodity supplies; monitor and evaluate the accuracy of both short-term forecasts and long-range projections of commodity supply and demand, including the construction and maintenance of an extensive data base needed to monitor and evaluate the accuracy of both U.S. and global forecasts and projections, and; compile a remote sensing inventory, which will provide the basis for targeting remote sensing applications research, inform users of ongoing activities, facilitate comparison and evaluation of alternative remote sensing methodologies, and furnish a basis for evaluating remote sensing as an information source.

During lockup, the World Board is totally isolated and dependent on its in-house computer system. To assure timely release of the highly market sensitive WASDE report, the World Board needs funds for ADP maintenance and replacement of obsolete equipment. Outdated and unreliable personal computers, disk drives, monitors and printers will be replaced with technologically superior and more reliable equipment.

Additional statistical support is needed for the purpose of providing support to higher level staff. This position would manage the Board's economics data base, prepare graphics and tables as requested, input data for the World Agricultural Supply and Demand Estimates report, and provide backup for report preparation during lockup.

Funds are needed to cover the January 1989 pay costs, which are being absorbed in full by the World Board in FY 1990. Funds are also needed for the FY 1991 pay costs and the SES pay raise, 50 percent of which is to be absorbed by the Agency.

This concludes my statement, Mr. Chairman. My associates and I are prepared to answer any questions you may have concerning WAOB programs and budget request.

WORLD AGRICULTURAL OUTLOOK BOARD

Purpose Statement

The World Agricultural Outlook Board (WAOB) was created by the Secretary of Agriculture on June 3, 1977, under the authority of the Reorganization Plan No. 2 of 1953. The WAOB serves as the single focal point for the Nation's economic intelligence related to domestic and international food and agriculture, and is responsible for coordination and clearance review of all commodity and aggregate agricultural and food-related data used to develop outlook and situation material within the Department of Agriculture. The WAOB's primary objective is to improve the consistency, objectivity and reliability of outlook and situation material developed in the Department.

WAOB functions include information dissemination; market surveillance; coordination of assessments of international and domestic agricultural developments; and coordination of weather, climate and remote sensing research and forecasting techniques.

The WAOB is located in Washington, D.C. As of September 30, 1989, there were 27 full-time employees. Budget, personnel, administrative and general managerial support are provided by the Economics Management Staff.

WORLD AGRICULTURAL OUTLOOK BOARD

Available Funds and Staff-Years

1989 Actual and Estimated, 1990 and 1991

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
World Agricultural Outlook Board	$1,820,000	28	$1,910,000	32	$2,404,000	33
Obligations under other USDA appropriations:						
Forest Service for Centennial Cooperative Weather Station	3,000	--	--	--	--	--
Economic Research Service for annual Outlook Conference	13,577	--	16,500	--	17,000	--
Extension Service for annual Outlook Conference	9,050	--	11,000	--	11,300	--
Foreign Agricultural Service for annual Outlook Conference	4,526	--	5,500	--	5,700	--
Total, Other USDA Appropriations	30,153	--	33,000	--	34,000	--
Total, Agriculture Appropriations	1,850,153	28	1,943,000	32	2,438,000	33
Total, World Agricultural Outlook Board	1,850,153	28	1,943,000	32	2,438,000	33

Full-Time Equivalent Staff-Years:	1988 Actual	1989 Estimated	1990 Estimated
Ceiling	28	32	33
Non-ceiling	--	--	--
Total	28	32	33

WORLD AGRICULTURAL OUTLOOK BOARD

Permanent Positions by Grade and Staff-Year Summary

1989 and Estimated 1990 and 1991

Grade	1989 Headquarters	1990 Headquarters	1991 Headquarters
ES-4	2	2	2
GS/GM-15	8	9	9
GS/GM-14	3	3	3
GS/GM-13	2	3	4
GS-12	5	7	7
GS-11	2	1	2
GS-9	1	3	3
GS-8	1	1	1
GS-7	2	3	2
GS-6	1	--	--
Total Permanent Positions	27	32	33
Staff-Years:			
Ceiling	28	32	33
Non-Ceiling	--	--	--
Total	28	32	33

WORLD AGRICULTURAL OUTLOOK BOARD

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

		1989	1990	1991
Personnel Compensation:				
	Headquarters	$1,288,901	$1,357,000	$1,512,000
	Field	- -	- -	- -
11	Total personnel compensation	1,288,901	1,357,000	1,512,000
12	Personnel benefits	177,553	194,000	214,000
13	Benefits for former personnel	35	- -	- -
	Total pers. comp. & benefits	1,466,489	1,551,000	1,726,000
Other Objects:				
21	Travel	35,312	32,000	32,000
22	Transportation of things	362	- -	- -
23.3	Communications, utilities, and misc. charges	57,223	60,000	60,000
24	Printing and reproduction	22,985	24,000	24,000
25	Other services	145,317	166,000	305,000
26	Supplies and materials	22,497	22,000	24,000
31	Equipment	54,812	55,000	233,000
43	Interest and dividends	90	- -	- -
	Total other objects	338,598	359,000	678,000
	Total direct obligations	1,805,087	1,910,000	2,404,000
Position Data:				
	Average Salary, ES positions	$76,149	$79,200	$94,000
	Average Salary, GM/GS positions	$45,760	$47,288	$48,326
	Average Grade, GM/GS positions	12.68	12.23	12.39

WORLD AGRICULTURAL OUTLOOK BOARD

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

World Agricultural Outlook Board:

For necessary expenses of the World Agricultural Outlook Board to coordinate and review all commodity and aggregate agricultural and food data used to develop outlook and situation material within the Department of Agriculture, as authorized by the Agricultural Marketing Act of 1946 (7 U.S.C. 1622g), [$1,936,000] $2,404,000: Provided, That this appropriation shall be made available for employment pursuant to the second sentence of section 706(a) of the Organic Act of 1944 (7 U.S.C. 2225).

WORLD AGRICULTURAL OUTLOOK BOARD

Appropriations Act, 1990		$1,936,000
Budget Estimate, 1991		2,404,000
Increase in Appropriation		+468,000
Adjustments in 1990		
Appropriation Act, 1990	$1,936,000	
Gramm-Rudman-Hollings Reduction (P.L. 99-177)	-26,000	
Adjusted base for 1990		$1,910,000
Budget Estimate, 1991		2,404,000
Increase over adjusted 1990		+494,000

SUMMARY OF INCREASES AND DECREASES
(On basis of adjusted appropriation)

Item of Change	1990 Estimated	Pay Cost	Program Changes	1991 Estimated
Improved Operation of Agricultural Weather Systems	- -	- -	+$184,000	$184,000
ADP Maintenance and Replacement	$49,000	- -	+86,000	135,000
ADP Management Support	- -	- -	+38,000	38,000
Economic Meteorological Data Base Expansion/Remote Sensing Inventory	- -	- -	+109,000	109,000
All Other	1,861,000	+$77,000	- -	1,938,000
Total Available	1,910,000	+77,000	+417,000	2,404,000

PROJECT STATEMENT
(On basis of adjusted appropriation)

Project	1989 Actual		1990 Estimated		1991 Estimated		
	Amount	Staff-Years	Amount	Staff-Years	Increase	Amount	Staff-Years
1. Commodity and Aggregate Agricultural and Food Outlook and Situation..	$1,805,087	28	$1,910,000	32	+$494,000	$2,404,000	33
Unobligated balance lapsing.	14,913	--	--	--	--	--	--
Total, available or estimate.....	1,820,000	28	1,910,000	32	+494,000	2,404,000	33
Gramm-Rudman-Hollings Reduction.	--	--	+26,000	--			
Total, appropriation............	1,820,000	28	1,936,000	32			

EXPLANATION OF PROGRAM

The World Agricultural Outlook Board (WAOB) coordinates and reviews for clearance all commodity and aggregate agricultural and food-related data used to develop outlook and situation material within the U.S. Department of Agriculture. The WAOB provides a focal point for the Nation's economic intelligence relative to domestic and international food and agriculture, with two primary objectives: improving the consistency, objectivity, and reliability of outlook and situation material being disseminated to the public; and integrating and coordinating USDA domestic and international economic information assistance. In a cooperative effort with the National Oceanic and Atmospheric Administration, the WAOB operates the Joint Agricultural Weather Facility which provides a daily review of significant weather developments around the world and their implications for agriculture. The WAOB's functions include market surveillance; coordination of assessments of international and domestic agricultural developments; weather, climate and remote sensing coordination; and forecasting techniques and information dissemination.

JUSTIFICATION OF INCREASES

(1) An increase of $494,000 as follows:

(a) An increase of $184,000 for improved operation of agricultural weather systems.

Need for Change. Rapid preparation and dissemination of timely and accurate agricultural weather information has become an essential tool for USDA decision-makers. The demand for high quality products to keep officials and analysts aware of both current events and accurate interpretations of seasonal conditions has increased substantially due to heightened concerns about weather variability around the world.

Nature of Change. Funding is needed to purchase, lease, install and maintain a weather information system. This system will provide the capability for rapid data retrieval, surveillance, and generation of high quality data and analysis to depict pertinent information for dissemination through briefings and releases.

(b) An increase of $109,000 for economic meteorological data base expansion/remote sensing inventory.

Need for Change. Participation in meteorological data base development at regional agricultural weather centers which provide farmers with weather data for use in making production decisions, is needed to facilitate USDA access to this critical information source. In January 1988, the Secretary of Agriculture directed the Assistant Secretary for Economics to take those actions needed to insure that the best expertise and analyses of the Department are incorporated into long-range projections. Funding is needed to coordinate USDA long-range commodity projections, monitor and evaluate the accuracy of global commodity supply/use projections and short-term forecasts. Finally, funding is requested to inventory and document, with contractor assistance, USDA-wide remote sensing activities, which total approximately $22 million. The inventory will strive to identify high priority areas not covered and to avoid costly duplication.

Nature of Change. Funds are needed to expand coverage and prepare improved crop yield assessments for the United States. This initiative would be dedicated entirely to monitoring U.S. weather and preparing related crop impact assessments. Funds are also needed to coordinate and monitor USDA long-range commodity supply/demand projections, both domestic and foreign. Long-range commodity projections underlie estimates of expenditures by the Commodity Credit Corporation and estimates of program outlays in the President's Five-Year Budget. The accuracy of global commodity supply/demand estimates will be evaluated for the purpose of improving USDA forecasting performance. This will require construction and maintenance of an extensive data base. Finally, a remote sensing inventory will provide a basis for targeting remote sensing applications research, inform users of ongoing activities, facilitate comparison and evaluation of alternative remote sensing methodologies, and provide a basis for evaluating remote sensing as an information source.

(c) An increase of $86,000 for ADP maintenance and replacement.

Need for Change. The Board's ADP equipment is strategic to the successful and timely preparation of lockup reports. During lockup the Board and its computer system are isolated and outside assistance cannot be obtained in the event of system failure. The World Board ADP hardware inventory has significantly expanded. Since FY 1985, the Board's maintenance and replacement budgets have not kept pace with the Board's increased dependence on sophisticated ADP technologies. Present funding is inadequate to maintain and replace equipment which, allowing for mechanical and technical obsolescence, has an average service life of less than 3 years.

Nature of Change. Funding is needed for ADP maintenance and replacement of obsolete equipment. Obsolete and unreliable personal computers, disk drives, monitors and printers will be replaced with technologically superior and more reliable equipment. It is requested that the World Board maintenance and equipment budget be increased by $86,000.

(d) An increase of $38,000 for data management support.

Need for Change. The World Board has serviced demands for timely economic information largely through automation. Industrious use of computers has enabled the Board to be highly responsive to this growing list of demand with virtually no support staff. As a result, high graded staff must perform routine computer operations which could be more efficiently performed by an entry-level position.

Nature of Change. Additional statistical support is needed for the purpose of providing support to higher level staff. This position would manage the Board's economics data base, prepare graphics and tables as requested, input data for the World Agricultural Supply and Demand Estimates report, and provide backup for report generation during lockup. This position would also download reports from electronic mail boxes for review, input reports into the USDA-Electronic Dissemination of Information System, fax material as requested, and provide backup for monitoring wire systems for preparation of Daily Highlights.

(e) A total increase of $77,000 for restoration of FY 1989 pay costs ($43,000) and FY 1991 pay costs ($34,000). (The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.)

Need for Change. Since the World Board is a small agency, it does not have the budget flexibility to absorb pay costs. These funds will help sustain the program level and performance.

Nature of Change. The funds will be used for the January 1989 pay costs of 4.1 percent absorbed in full by the World Board in FY 1990. These funds will also be used for the FY 1991 pay costs of 3.5 percent, and the SES pay raise, fifty percent of which is to be absorbed by the agency.

World Agricultural Outlook Board
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 and Estimated 1990 and 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
District of Columbia	$1,805,087	28	$1,910,000	32	$2,404,000	33
Total Available or Estimate.......	1,805,087	28	1,910,000	32	2,404,000	33

WORLD AGRICULTURAL OUTLOOK BOARD

STATUS OF PROGRAM

The World Agricultural Outlook Board (WAOB) coordinates and reviews for clearance all commodity and aggregate agricultural and food-related data used to develop outlook and situation material within the U.S. Department of Agriculture. Prior to the creation of WAOB on June 3, 1977, agricultural outlook and situation data was collected, analyzed and reported by several agencies in USDA. The Board's role is to coordinate and assure the accuracy, timeliness, and objectivity of USDA's agricultural outlook and situation analysis. The Board not only directs the compilation and review of critical economic intelligence data, it also makes sure the essential information quickly reaches policymakers and the public, especially the U.S. farmer.

Current Activities: WAOB functions include information dissemination; market and agricultural weather surveillance; coordination of USDA forecasts of international and domestic agricultural developments; and coordination of weather, climate and remote sensing research activities.

Selected Examples of Recent Progress: As a part of USDA's ongoing effort to integrate national and international commodity and analytical systems, the WAOB continued to publish the World Agricultural Supply and Demand Estimates (WASDE), which provides projections of world and U.S. supply and utilization data for grains, oilseeds and cotton; and U.S. estimates for red meat, poultry, eggs and milk. The report also includes forecast reliability tables for selected commodities and parameters.

To provide reliable indications of early-season weather impacts, special procedures were used to project U.S. corn, soybean and cotton crops in the July WASDE report. The projections proved to be very close to those made by NASS in August on the basis of survey data. The timely projections were instrumental for both private and Government decisionmaking and set the stage for the quick preparation of disaster assistance legislation.

The Joint Agricultural Weather Facility (JAWF), operated by the WAOB and the National Oceanic and Atmospheric Administration, published the Weekly Weather and Crop Bulletin. The facility continued to monitor and interpret significant global weather developments and their implications for agriculture. Global weather stations in the facility's historical data base were expanded to improve analysis. JAWF analysts played a key role in analyzing extreme weather conditions which plagued U.S. agriculture throughout the past year and were able to supply timely reliable information. The Board furnished reports to the Secretary's Office and the Department's Drought Task Force on an almost daily basis, and directly briefed the House and Senate Agriculture Committees. Considerable support was given in preparation of highly sensitive material for public release by the Drought Task Force.

With responsibility for chairing all interagency commodity estimates committees, the WAOB continued to further advance and focus USDA's operation of a coordinated information system across the Department, Government and industry, both domestically and worldwide. The Board continued efforts to improve the 5-year commodity supply/use projections that underlie Federal Budget and USDA farm program planning. An Interagency Agricultural Projections Committee, created in 1988 and chaired by the Board, was staffed with a full-time coordinator. The Committee undertook an active program of work and made recommendations on projections provided for the President's mid-session update.

The Board expanded and improved its ongoing activity daily reports and weekly briefings of significant agricultural developments for the Secretary and other top officials.

To better serve subscribers to the WASDE report and make the report more widely available, the Board joined other USDA Economics agencies in offering subscriptions through a contractor that provides a full range of subscription options and services.

As the Department's coordinator of remote sensing activities, the WAOB continued to facilitate government-wide efforts to interpret weather's impact on agriculture. Working with members of USDA's Remote Sensing Coordination Committee, WAOB played a key role in developing USDA's positions with respect to continuing of the U.S. civil space-based remote sensing program, preparing USDA testimony to Congress and making important contributions to National Space Council recommendations to continue the Landsat program that were ultimately accepted by the President.

The Board was instrumental in the international and domestic Government-wide effort related to global climate change, including planning and budgeting for a new Presidential initiative on global change and advising several international scientific bodies planning global change projects.

Existing links with the Commodity Futures Trading Commission were greatly strengthened under a formal CFTC-USDA agreement to ensure that the futures markets best serve the interests of both farmers and consumers.

The Board orchestrated USDA's 65th Agricultural Outlook Conference held in November 1988, a highly successful meeting. Prominent speakers explained the likely aftermath of the drought of 1988 and highlighted the long term marketing challenges facing agriculture, attracting an audience of more than 1,000. Press attendance was record large and portions of the conference were carried by C-Span.

FRIDAY, MARCH 9, 1990.

PACKERS AND STOCKYARDS ADMINISTRATION

WITNESSES

JO ANN SMITH, ASSISTANT SECRETARY FOR MARKETING AND INSPECTION SERVICES

VIRGIL M. ROSENDALE, ADMINISTRATOR, PACKERS AND STOCKYARDS ADMINISTRATION

CALVIN W. WATKINS, DEPUTY ADMINISTRATOR, PACKERS AND STOCKYARDS ADMINISTRATION

WILLIAM A. ASHLEY, STAFF DIRECTOR, MANAGEMENT SERVICES STAFF, PACKERS AND STOCKYARDS ADMINISTRATION

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Mr. WHITTEN. The subcommittee will come to order.

We are mighty glad to have you here. On Fridays it is hard to find our colleagues in town with so many things going on both here and back home.

But Mr. Skeen and I will go ahead.

We have two agencies here that historically have done a real fine job. I want to say that the Department of Agriculture, in my opinion, has done a good job.

Sometimes we have witnesses without any background and experience and we have to try to teach them a little bit. But now and then some of them teach us, too. We are glad to have you.

Ms. JO ANN SMITH. Thank you, Mr. Chairman.

Mr. Chairman, and Congressman Skeen, I would like to present to you this morning our budget for the Packers and Stockyards Administration. As you know, this agency assures the integrity of the livestock, meat, and poultry markets as well as the marketplace.

It also has responsibility to protect both producers and consumers from unfair business practices which can unduly affect meat and poultry distribution and prices both, in our markets all over the country.

It is my pleasure to introduce the new Administrator, Virgil Rosendale, who comes to P&SA from Augusta, Illinois. He is a swine producer, a grain farmer and has cattle. He has been a successful farmer.

I am sure he will bring a great deal of talent and ability to the position of Administrator of P&SA, because he has first-hand knowledge of how it works in the real world.

Mr. WHITTEN. He will do well to live up to his predecessors. I don't know that it has to be improved. We have been pleased.

We have had a number of situations involving P&SA through the years, but it has been well handled, in my opinion.

We wish you well. We will be glad to hear from you.

Mr. ROSENDALE. Thank you, Mr. Chairman.

ADMINISTRATOR'S STATEMENT

Mr. Chairman, and Congressman Skeen, I appreciate the opportunity to come before the subcommittee to discuss the programs of the Packers and Stockyards Administration (P&SA) and the agency's budget request for fiscal year 1991.

First, I would like to introduce two members of the staff who are accompanying me today, Calvin W. Watkins, the Deputy Administrator, and William A. Ashley, the agency's budget officer.

Mr. WHITTEN. The biographical sketch will be included in the record.

PROGRAMS UNDER THE P&S ACT

Mr. ROSENDALE. You and other Members of the subcommittee are familiar with the traditional programs of the agency.

As you are aware, the mission of the Packers and Stockyards Administration is to assure fair trade practices and competitive markets for livestock, meat, and poultry. The programs of the agency are designed to foster fair and open competition, guard against deceptive and fraudulent practices, and provide payment protection in the marketing of livestock, meat, and poultry.

In addition to the Packers and Stockyards Act, the agency is responsible for administering the Clear Title provisions contained in Section 1324 of the Food Security Act of 1985. Additional responsibility was also added when the Packers and Stockyards Act was amended in 1987 by the "Poultry Producers Financial Protection Act" to add statutory trust and payment provisions for poultry similar to those adopted in 1976 for livestock producers.

The production and marketing of livestock, meat, and poultry are important to American agriculture and have a significant impact on the nation's economy.

In 1989, cash farm receipts of livestock and poultry were $57 billion, approximately 36 percent of total receipts. The wholesale value of red meat and poultry in 1989 has been estimated by the Department of Commerce to be approximately $86 billion.

At the end of fiscal year 1989, there were 1,765 posted stockyards; 9,925 registrants, including 7,326 market agencies/dealers and 2,599 packer buyers; approximately 6,500 slaughtering and processing packers; and an estimated 6,900 meat distributors, brokers, and dealers. Of the slaughtering packers, 619 were bonded and those purchasing over $500,000 worth of livestock were also required to file annual reports with the agency. There are an estimated 250 poultry firms subject to the Act.

Livestock, meat, and poultry production and marketing continue to change. Fortunately, the Act is written in a manner which has allowed the agency to modify its programs and adapt to a changing industry.

The agency has two major program areas under the P&S Act: Livestock Marketing and Packer and Poultry. It is a goal of the agency under normal circumstances to allocate its resources on an equal basis between the two major program areas. However, the agency must maintain allocation flexibility so that it can respond to changing conditions.

For example, the current financial problems in the industry require that additional resources be channeled to financial and payment protection activities.

PAYMENT PROTECTION

Payment protection is a major concern to livestock and poultry producers, and it is particularly important to the stability of the farm economy for them to receive full payment when due.

Under these conditions, the agency again has allocated additional resources and given special priority to the financial area. During fiscal year 1989, five auction markets failed financially owing $218,000 for livestock; $187,000 was recovered from bonds and other sources. Also, during the last fiscal year, 16 dealers/order buyers failed owing $1.5 million for livestock, of which about $200,000 was recovered, leaving $1.3 million unpaid.

Since 1985, an average of more than 20 meat packers have experienced financial failure annually. The statutory packer trust provision in the P&S Act contributed significantly to reducing producer losses when the packers failed.

During fiscal year 1989, cash sellers of livestock were paid $1.1 million from 9 packers under the statutory packer trust provision. This brings the total paid to cash sellers to over $32.4 million since the adoption of the trust provisions of the Act in 1976.

In addition to amounts recovered under the trust, proceeds from packer bonds paid $233,000 in 1989.

Since the poultry amendments to the Act became effective, the agency has investigated nine poultry failures. The poultry trust provision has been helpful in reducing losses to poultry sellers and growers in these cases.

LIVESTOCK MARKETING

The primary responsibilities of the Livestock Marketing Division are to ensure prompt and full payment to livestock producers, prevent unfair trade practices, and foster open competition by stockyards, market agencies and dealers.

The bonding, solvency, and custodial account requirements are given top priority to provide maximum payment assurance to livestock producers.

Because of an increasing concern about the integrity of custodial funds, the agency has developed a review program to provide more frequent on-site audits of all custodial accounts.

This program will help identify market agencies that are misusing custodial funds and those that cannot make up shortages in the account.

In addition to the payment protection responsibilities, the investigation of fraudulent practices is given a high priority in the livestock marketing program. Emphasis is given to investigation of false weighing, weight and price manipulation, switching of livestock, and misrepresentation of the source, origin, and health of livestock.

Competition in livestock marketing is also a matter of concern. Competition for livestock should be open and free of restrictions.

Any practice, agreement, or understanding which excludes potential buyers from bidding in open competition is considered a restraint on competition.

Practices which result in the lessening of competition for producers' livestock include apportioning of territories, price agreements or arrangements not to compete, and payoffs or kickbacks to buyers. Information or complaints which indicate a possible restriction of competition are investigated on a priority basis.

PACKER AND POULTRY

The primary responsibilities of the Packer and Poultry Division are to assure prompt and full payment to livestock and poultry producers; to foster open and free competition in the procurement of livestock by packers; and to prevent noncompetitive practices in the marketing of meat and meat products.

High priority is given to assuring payment for livestock through bonding, solvency tests, and the statutory trust. The existence of the packer trust has helped reduce losses to producers selling livestock on a cash basis to slaughtering packers.

The poultry amendments to the Act, which became effective February 21, 1988, give similar protection to poultry growers and producers through statutory trust and payment provisions.

Regulations have now been published to implement the new statutory trust provisions and live poultry dealers will be filing annual reports for the first time this year.

The poultry program of the agency continues to take on added significance as a result of the 1987 amendments. The new administrative authority will make administration of the statutory trust and payment provisions more effective and efficient.

The agency, however, will continue to encounter serious delays concerning trade practice violations. Because administrative procedures cannot be utilized, the enforcement proceedings must be handled through the Federal District Courts, a costly and time-consuming process.

Mr. **Whitten**. Why don't you summarize the balance of your statement and we will put it in the record.

MEAT PACKER CONCENTRATION

Mr. **Rosendale**. I think one of the things I would like to highlight at the present time is the fact that meat packer concentration is a concern facing livestock people. Concentration accelerated during 1987 and continued into 1988.

From 1985 to 1987, ten slaughterers of steers and heifers were merged into five. Acquisitions have resulted in the merging of specialized poultry firms and traditional red meat firms.

The four largest slaughtering packers slaughtered 70 percent of the total steers and heifers in 1988.

Box beef production by the top four firms was 79 percent of the total production. We have seen an increased concentration in sheep and lamb slaughterers, and we have also seen a trend for increased slaughter of hogs.

SCALES AND WEIGHING

In our scales and weighing branch we continue to find that economic and competitive pressures on individuals and firms engaged in livestock marketing contribute to falsifying weights as a way to improve income. Fourteen percent of our 481 formal weighing investigations disclosed false and questionable weighing.

We continue to work with and develop training programs for State weights and measures officials, private scale testing companies and scale users. In our clear title responsibilities, 17 states have received certification.

We are continuing to review and monitor those procedures to assure that we are carrying out our responsibility for certification of the central filing system.

AGENCY-WIDE INFORMATION MANAGEMENT SYSTEM

Another area that needs highlighting, has to do with our agency-wide information management system. That is moving along slowly for us. It has virtually come to a standstill.

In this fiscal year the agency will be operating on a budget only $160,000 over the 1988 funding level, and increased costs and pay increases have been absorbed in other ways since 1988.

The additional responsibilities that were provided by the "Poultry Producers Financial Protection Act of 1987" added increased costs, and without additional funding we were unable to make the kind of progress that we wanted in the agency-wide information system.

We feel this system is necessary to expand our activities as they relate to registration and bonding, to enhance our ability to monitor the financial condition and debt paying ability of packers and to improve our office efficiency. We are currently working with word processing equipment that is to a great extent outdated and consequently we are unable to keep pace with the electronic capability of the people we are called upon to regulate.

FISCAL YEAR 1991 BUDGET REQUEST

Our budget request for fiscal year 1991 is for $10,687,000; $10,559,000 of that is for administration, $128,000 is for clear title.

This is an increase of $1,125,000. The additional funding would provide for $640,000 for computer hardware and software and for the development and training necessary to implement an agency-wide information management system.

It also provides $186,000 for additional operating costs and $299,000 to annualize the 1989 pay cost increases.

Mr. Chairman, the agency appreciates the opportunity to present this statement. We would be willing to respond to any questions if there are any.

[CLERK'S NOTE.—Biographical sketches appear on pages 161 and 162. Mr. Rosendale's written statement appears on pages 163 through 180. The Packers and Stockyards explanatory notes appear on pages 181 through 195.]

Mr. WHITTEN. Thank you Mr. Rosendale.

I will speak only for myself. I think Speaker Rayburn made his reputation going after these consolidations that turned out to be poor for business. I see so many signs now of the country making the same mistake. In the airlines business I have never seen so many crashes. They are getting so big, the big ones are eating up the small ones and doing away with competition, in my judgment, in many areas.

In my state things revolve around the county seat.

I believe this country is greater for all its parts, water systems, electric, roads and the rest. It looks like it is headed the other way.

Today's paper tells about how the taxes are pushed on the lower income people as against the top level. Everywhere you look the same thing is happening.

MEAT PACKER CONCENTRATION

My point is this is beyond our control, beyond congressional control at the present time. What effect has these consolidations had on the operations of your agency?

Have you had to make any changes to handle it as all this meat packing gets in a few hands? Are they creating additional problems?

Do you have to realign your people? What effect has it had on your operations?

Mr. ROSENDALE. The best answer I can give, Mr. Chairman is that it carries the potential for causing us to realign our people. Currently our situation is one of recognizing that it is an area of concern.

We are carrying forth with our responsibilities to monitor what is happening, look at the structure of the industries and what the trends are.

Of course, all the while we have to look for something that has to do with——

Mr. WHITTEN. The Committee will be interested in anything you have to change. You might need some help or support. The changes are occurring. We will be interested in having you keep us advised of what changes are necessary.

I am not condemning. As a former trial lawyer, I think anybody is entitled to have their say.

I don't want to stir up an individual case. But keep us advised, if you will.

Mr. ROSENDALE. I appreciate your request.

FINANCIAL FAILURES

Mr. WHITTEN. Last year, Mr. Jones testified at some length about the financial problems that plague marketing firms of meat and poultry. Has fiscal year 1989 been more encouraging from your perspective as to the condition of meat and poultry markets?

Mr. ROSENDALE. In fiscal year 1989, 23 packers experienced financial difficulty which were investigated by P&SA. Nine of these firms paid cash sellers $1.2 million under the statutory packer trust provision.

So far in fiscal year 1990, 16 packers have experienced financial difficulty. Based on the present trend, it appears that firms engaged in meat and poultry marketing continue to have significant financial problems.

PACKER TRUST

Mr. Whitten. For the record, would you provide a table showing the yearly amount of monies paid out under the Statutory Trust for Packers and Stockyards adopted in 1976?

[The information follows:]

Fiscal year:	*Amount paid*
1977	$167,850
1978	1,849,541
1979	6,006,177
1980	2,003,838
1981	2,871,321
1982	4,055,709
1983	3,454,208
1984	2,874,727
1985	3,908,091
1986	2,251,625
1987	768,360
1988	1,037,542
1989	1,167,822
Total	32,476,811

Mr. Whitten. You indicated that 23 packer trust investigations were conducted during fiscal year 1989. How is it you become aware of the need to do an investigation?

Mr. Rosendale. The majority of packer trust investigations are the result of complaints received by our regional offices from firms/individuals owed for livestock. These complaints normally involve nonpayment for livestock or the return of insufficient funds checks to sellers.

MEAT PACKER CONCENTRATION

Mr. Whitten. One of the main concerns of the meat packing industry is concentration of packers. This concentration in some cases has resulted in captive supplies where both packer feeding and contracting, including cattle and hogs, comes under marketing agreements. Would you provide for the Committee the most recent data you have in the area of meat packer concentration?

Mr. Rosendale. I will provide a list of the four-firm concentration figures for years 1979–88. The figures for 1989 are not available at this time. Reporting firms have until April 15, 1990 to file their 1989 report.

[The information follows:]

FOUR-FIRM CONCENTRATION

[Reporting years 1979–88]

Year	Steers and heifers	Boxed beef	Cows and bulls	Hogs	Sheep and lambs
1979	35	51	10	34	64
1980	36	53	10	34	56
1981	40	57	10	33	52
1982	41	59	9	36	44
1983	47	60	10	29	44
1984	50	62	11	35	49
1985	50	62	17	32	51

FOUR-FIRM CONCENTRATION—Continued

[Reporting years 1979–88]

Year	Steers and heifers	Boxed beef	Cows and bulls	Hogs	Sheep and lambs
1986	55	68	18	33	54
1987	67	80	20	37	75
1988	70	79	18	34	77

VERTICAL INTEGRATION

Mr. WHITTEN. We know that the Packers and Stockyards Administration spends some of its time reviewing proposals by packers to "vertically integrate." For the record, would you define the term "vertically integrate?"

Mr. ROSENDALE. Vertical integration is the combination, under one focus of ownership or control, of more than one stage of the various production processes involved in converting the initial raw products to the finished products. A theorist might argue that any modern assembly-line factory is vertically integrated, since physically each stage in the line could be run as a separate, stand-alone operation. The set of stages considered as normally parts of an enterprise, and not labeled vertically integrated, are determined in part by custom and tradition, but are largely determined by economic factors.

Thus, in the livestock-meat industry, we have historically viewed cow-calf production, feeding, slaughter, fabrication, distribution, wholesaling, and retailing as distinct, separately operated enterprises. Changing economic relationships in recent years have modified this somewhat, especially with respect to the combination of slaughter and fabrication within single enterprises.

SLAUGHTERING AND PROCESSING PACKERS

Mr. WHITTEN. For the record please provide a ten-year table showing the number of slaughtering and processing packers subject to the P&S Act. Please break that table down into the number of bonded slaughtering packers, non-bonded slaughtering packers, and processing packers.

[The information follows:]

SLAUGHTERERS AND PROCESSORS SUBJECT TO P&S ACT—1980–89

Year	Bonded slaughterers	Nonbonded slaughterers [1]	Federally inspected processors
1980	[1] 875	725	4,551
1981	868	675	4,631
1982	866	825	4,852
1983	888	775	[1] 4,850
1984	797	875	[1] 4,950
1985	747	875	4,754
1986	691	850	4,807
1987	634	850	[1] 4,700
1988	638	750	4,645
1989	619	750	[1] 4,700

[1] Estimates.

FINANCIAL PROTECTION

Mr. WHITTEN. Last year, Mr. Jones testified that P&SA anticipated approximately 84 compliance audits for solvency to be conducted each year. We note in your explanatory notes that for fiscal year 1989, only 43 compliance audits were conducted. Are there other compliance audits for solvency conducted within your agency?

Mr. ROSENDALE. Yes, we have conducted other compliance audits for solvency during fiscal year 1989.

Mr. WHITTEN. What are they and how many were conducted last year?

Mr. ROSENDALE. The 43 compliance audits shown in the explanatory notes pertained only to dealers and market agencies. In fiscal year 1989, the agency also conducted 16 compliance audits of subject packers.

PACKERS TRUST

Mr. WHITTEN. For the record, please describe how the Packer Trust is funded. Also, do the same for the Live Poultry Trust.

Mr. ROSENDALE. The packer trust is funded from livestock bought in cash sales by the packer and inventories, receivables, and proceeds of the packer derived from meat, meat food products or livestock products. With regards to a live poultry trust, only poultry bought in cash sales, poultry produced under growing arrangements, inventories, receivables, and proceeds derived from poultry are used to fund a live poultry trust. Not all property of a packer or a live poultry dealer is subject to a packer trust under the provision. Examples of property not subject to a trust are plant equipment and buildings.

CLEAR TITLE

Mr. WHITTEN. You indicate in your notes that 18 States have applied to have their Security Interest Central Filing Systems approved. For the record please identify these States.

Mr. ROSENDALE. The following States have applied to have their central filing systems certified: Alabama, Colorado, Idaho, Louisiana, Maine, Mississippi, Montana, Nebraska, New Hampshire, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Vermont, West Virginia, and Wyoming.

Mr. WHITTEN. Arkansas recently repealed its enabling legislation for a central filing system. Do you have any information as to why the State changed its position?

Mr. ROSENDALE. According to information received from State officials, there were not sufficient funds to operate the system and interested groups supported repeal of the legislation.

Mr. WHITTEN. Are there any States with applications still pending for clear certifications?

Mr. ROSENDALE. Yes, Colorado's application is still pending.

Mr. WHITTEN. We understand that the Central Filing Systems for Clear Title is a costly system to operate by States. Do you have any information to give that would estimate the general cost to the individual States?

Mr. ROSENDALE. Information is not available to estimate the cost of operating a central filing system; however, in some States the cost of operating the system is recovered in the fee structure.

SCALES AND WEIGHING

Mr. WHITTEN. Over the years, you have indicated that the Packers and Stockyards Administration spends a considerable amount of its time on cases involving dealers and order buyers who manipulate weights and prices. For the record, please provide a five-year table with the number of firms discovered from your investigations to have false weighing practices.

[The information follows:]

PACKERS AND STOCKYARDS ADMINISTRATION WEIGHING INVESTIGATIONS

Year	Checkweighing and direct sale			Other [1]			Total		
	Investigation	Violation	Percent	Investigation	Violation	percent	Investigation	Violation	Percent
1989	431	68	14	115	43	37	596	111	19
1988	543	73	13	125	50	40	668	123	18
1987	418	73	17	75	32	43	493	105	21
1986	382	61	16	148	70	47	530	131	25
1985	287	66	23	154	73	47	441	139	32

[1] Other investigations include records audits for weight manipulation and tests for accuracy of tare deductions on hot and cold carcass weights.

Mr. WHITTEN. The percentage of those investigations that disclose false weighing has remained approximately the same for fiscal years 1988 and 1989. When your staff is doing investigations, are they able to determine or do they distinguish between those cases which are obviously intentional and those where it might be unintentional to have scales that aren't correct?

Mr. ROSENDALE. In every case our investigators attempt to determine the cause of the false weights. A thorough inspection and, if necessary, test of the scale in use is a vital element in each weighing investigation. Since most of these investigations involve reweighing of livestock over the same scale on which they were originally weighed, and under the same conditions, the accuracy of the scale is not a factor in most cases. Rather, it is usually either intentional misweighing or carelessness in the weighing operation. An exception to this would be a scale which is defective in such a way that it gives inconsistent weight indications. Such defects, if they exist, are detected during the weighing operation or during the subsequent inspection and test.

Mr. WHITTEN. Is your staff able to make any allowances for those where they feel the error was unintentional?

Mr. ROSENDALE. Allowances are always made for unintentional weighing errors. Formal action is initiated only where the false weighing is either intentional or results from a careless disregard for proper weighing procedures or practices. A determination of careless disregard is made only after more than one prior instance of using improper procedures or practices, written notification of such, and instruction as to what is proper. Less than two percent of the weighing investigations made by the agency result in formal action. In most cases, written notice and instruction is sufficient to correct the problem.

POULTRY TRUST

Mr. WHITTEN. During fiscal year 1989, you indicated that approximately 275 poultry operations would be subject to the Live Poultry Trust Act. Your notes indicate that now 250 operations are subject to the Act. Is this a re-estimate or have poultry operations also started to consolidate similar to packer operations?

Mr. ROSENDALE. To implement the "Poultry Producers Financial Protection Act of 1987," the agency conducted nationwide visits to live poultry dealers in fiscal years 1988 and 1989. From these visits and other information received, it was determined that some small firms included in our original estimate of 275 poultry operations were not operating subject to the Packers and Stockyards Act. In addition, some firms ceased operations or have been bought out or merged with other firms, most notably, Tyson Foods' purchase of Holly Farms. A number of poultry firms have continued to expand their operations through the building of new feed mill and processing facilities but, other than the Tyson/Holly merger, no appreciable degree of consolidation occurred in the poultry industry during 1989.

AGENCY-WIDE INFORMATION MANAGEMENT SYSTEM

Mr. WHITTEN. Last year, Mr. Jones testified that P&SA was continuing to make progress in implementing its Automated Information Management System. This year your budget request has a significant increase for development of an Agency-wide Information Management System. What is the difference between what you have been doing the past couple of years and your request for an increase?

Mr. ROSENDALE. Our request for an increase represents our need to continue our efforts in developing AIMS.

In recent years, we have concentrated on completing our automated database of registered entities. We have developed a national database which includes information on all registrants and use it daily at headquarters. Each of our twelve regional offices also has a functioning database, installed on a single personal computer, which contains information on registrants in that region.

However, since each region only has the database on a single personal computer, it is only accessible to one person at a time, and only in a centralized location. The pc's are of somewhat limited capacity relative to the potential uses we could make of the database. We need to continue the development by installing an automated system which will provide all investigative staff access to the information.

Our request for an increase reflects a need to continue developing and implementing a fully automated information management system. Such a system is necessary to provide multi-user computer systems for expanding database applications for registration and bonding for those subject to the Packers and Stockyards Act; enhancing the agency's ability to monitor the financial condition and debt-paying ability of meat packers; and improving office efficiency by computer generation and control of correspondence and documents through systematic replacement of obsolete word processors.

The system will also provide risk analysis capabilities for identifying financially weak livestock dealers and market agencies.

Mr. WHITTEN. As part of your justification, you indicate that present equipment is inadequate in number and capability and that this causes resistance to the entire computerization effort. Does the reference to number refer to personal computers, and if so, how many does P&SA currently have and what are you expecting to purchase in fiscal year 1991?

Mr. ROSENDALE. To the extent employee resistance is due to inadequate numbers, this does refer to personal computers. The agency presently has approximately 55 personal computers. Approximately half of these are early-model IBM pc's or Compaq portables, from five to eight years old. We have not definitely set acquisition plans for fiscal year 1991, and in fact will purchase few, if any, unless extra funds are available. However, our analyses have identified needs for approximately 120 additional computers. These include lap-top computers for field investigative use, desk-top computers for word processing and general office operations, 12 high-powered, "multi-user host" computers providing for multiple simultaneous access to users of each of the regional databases, and additional desk-top computers for our investigators.

DEBT-PAYING ABILITY ANALYSIS

Mr. WHITTEN. Please describe in some detail the agency's Debt Paying Ability Analysis capability for monitoring packers' financial conditions. Where do you obtain the data to input into this system?

Mr. ROSENDALE. The Debt Paying Ability Analysis—DEPA—was developed by P&SA as a tool to assist in preventing financial losses of producers who sell livestock to meat packing firms. The DEPA system is designed to capture multi-year data to enable P&SA to examine changes in financial data and ratios over a period of five years and to analyze the changes in the financial condition of a packer over this period.

One of the primary functions of the DEPA system is to serve as an early warning of potential problems of a meat enterprise. A number of financial ratios are calculated from input data from the packer annual report and a risk rating model has been created which examines a number of financial ratios and projects the probability that a packer will experience financial problems.

In addition to analysis of financial ratios and indicators, agency personnel use judgement, experience, and knowledge of individual firms, as well as the industry, to evaluate the financial condition of a firm to prevent losses to producers.

Data input into this system is obtained from packer annual reports filed with the agency on a calendar or fiscal year basis. Packer annual reports are completed by all packers purchasing over $500,000 in livestock annually.

AGENCY RESOURCES

Mr. WHITTEN. There are seven specific areas in which the Packers and Stockyards Administration spends the majority of its resources. They include payment protection, livestock marketing, competition and conflicts-of-interest, meat marketing, scales and weighing, drug residues, and poultry. Please provide a breakout for fiscal year 1989 that shows the resources in terms of funds and manpower spent on each of these activities.

Mr. ROSENDALE. Records maintained by the agency do not provide the information according to the breakdown requested. I will provide what information is available for the record.

[The information follows:]

	Funds	Manpower in staff years
Payment protection	$2,254,600	44
Livestock marketing	1,763,600	34
Competition and conflicts-of-interest	492,000	9
Meat marketing	712,500	14
Scales and weighing	870,000	17
Drug residues	4,000	
Poultry	178,500	4

FRAUD IN BULK MEAT SALES

Mr. WHITTEN. We know that P&SA participated in a national meeting on Fraud in Bulk Meat Sales. The meeting was intended to provide information that would assist State and Federal agencies in curbing bait-and-switch practices, particularly by freezer meat operators. Were there any specific recommendations from this meeting, and if so, please provide them for the record?

Mr. ROSENDALE. Information developed at the meeting indicted an urgent need to organize a task force to prepare a report to identify the sources and causes of fraudulent conduct associated with bait-and-switch selling of bulk meat in the United States.

A task force of 12 members was selected, including a representative of P&SA, which will analyze questionnaires distributed nationally to concerned Federal, State, municipal and private agencies, such as the Better Business Bureau, from which a final report will be presented to an appropriate Federal agency, perhaps the Attorney General, requesting that a Federal/State investigative task force be organized to work on the problem on a national scale.

DRUG RESIDUES

Mr. WHITTEN. The issue of chemical residues in the American food chain has become a major issue in recent months. The President's request for fiscal year 1991 includes a major Food Safety Initiative to look specifically at drug and chemical residues in the food supply. Are any of the additional funds requested in the President's Initiative for food safety directed at the Packers and Stockyards Administration? If so, how are these to be used during fiscal year 1991?

Mr. ROSENDALE. No additional funds have been requested by the Packers and Stockyards Administration for use in drug and chemical residue work. This agency works with the Food Safety and Inspection Service and the Food and Drug Administration in their efforts to rid the food supply of illegal drug and chemical residues by assisting in the trace back of animals with violative residues to their origin. The Packers and Stockyards Administration has also investigated individuals and firms who cause false records at auction markets and packing plants by providing false certifications that animals are free of illegal residues.

POULTRY PRODUCERS FINANCIAL PROTECTION ACT OF 1987

Mr. WHITTEN. The Poultry Producers Financial Protection Act of 1987 had become effective only a short time before Mr. Jones testified before the Committee last year. That legislation significantly increased your agency's responsibilities to provide prompt payments and trust provisions to poultry growers and sellers. What has been the cost to your agency to implement that Act?

Mr. ROSENDALE. To date, the cost for implementation of the Act has been $460,000.

Mr. WHITTEN. Is it fully implemented at this point or are you still working on the operations aspects?

Mr. ROSENDALE. The agency has made initial visits to the poultry firms subject to the new poultry legislation to discuss their operations and the new requirements, such as statutory poultry trust provisions and payment requirements. In implementing the Act, the agency has initiated 9 poultry trusts. In addition, poultry annual reports have been developed and implemented for gathering financial and industry information. This information, along with employees' knowledge and contacts within the poultry industry, are used to obtain compliance with the new legislation. Due to lack of funding and other priorities, however, a full program to determine compliance has not been achieved.

WEIGHT AND PRICE MANIPULATION

Mr. WHITTEN. We note that you have 12 formal cases pending that involve weight and/or price manipulation by dealers and market agencies buying livestock on commission. You indicate that such cases are given high priority by regional personnel in their investigative activities. Would you please describe for us a typical situation involving this type of fraud and what actually happens from a P&SA standpoint?

Mr. ROSENDALE. A typical weight manipulation case would involve a dealer or market agency buying on commission billing on weights that have been increased by adding an arbitrary number of pounds to the actual scale weights. Another type of weight manipulation involves purchasing livestock with a pencil shrink. In this example, actual weight is reduced by a negotiated percentage to compensate for the fill condition of the livestock, and all or part of the pencil shrink is retained without disclosing such fact to the customer or principal. The motivation for such practices is to increase profits, disguise the actual per pound cost of the livestock, or in some instances, reduce losses. Regulation 9 CFR 201.55, issued under the authority of the P&S Act, requires that any adjustment to actual weights shall be fully and accurately explained on the accountings, bills or statements issued.

A typical price manipulation case would be one in which a market agency buying on commission arbitrarily increases the price of livestock over and above its actual cost and realizes a profit on the transaction in addition to the commission received from the principal. A market agency has a fiduciary responsibility to its principal and is entitled only to its commission and legitimate expenses. Often, these firms will arbitrarily increase both the weights and prices on the same transaction.

Violations involving weight and price manipulation are generally uncovered as the result of complaints or during a review of a firm's records. Investigation of these practices requires extensive examination of the firm's records as well as interviews with the customers to determine their understanding of the terms of the transaction.

Mr. **WHITTEN**. Mr. Skeen.

Mr. **SKEEN**. Madam Secretary, welcome.

Ms. **JO ANN SMITH**. Thank you, sir.

Mr. **SKEEN**. I want to welcome Mr. Rosendale and your colleagues.

As the Chairman says, we resist change but we make adjustments. The adjustments amount to a great deal of change.

MEAT PACKER CONCENTRATION

We have seen a linkage in the packing industries. Where are we headed, to a one meat packer monopoly?

If we keep shrinking the way we are going, P&SA is going to administer one or two entities. Then you won't need appropriations at all.

We won't let that happen, but are you going into a one or two packer monopoly in the red meat packing industry?

I am interested in your opinion. It has been an experience of my some 30-odd years watching this evolve into an ever-increasing monopoly in the packing business.

I don't know what you do to stop it because the economics have been very difficult.

Mr. **ROSENDALE**. Congressman Skeen, if you are asking for my opinion it would be that the trend is in the direction that you indicate. What we do about it, how to handle that, at the present time, may be out of our hands.

Mr. **SKEEN**. I know we don't try to effect the market. Sometimes it seems fatalistic, we see where we are dying because of the vertical integration in that part of the business, particularly the processing.

I don't know whether the economics are just not there. They have not been good in the past.

The competition was fierce once and now you have four packers doing 80 percent in the industry. What is it in pork?

Mr. **ROSENDALE**. Seventy-seven percent in lamb, 34 percent in pork. So it has not progressed to the extent in pork that it has in the other two species.

Mr. **SKEEN**. How many packers do you have handling lambs now in the United States? I am talking about major packers.

Mr. **ROSENDALE**. Four major packers handle 77 percent of the sheep and lamb killed.

Mr. **SKEEN**. Along with about 70 percent of the beef?

Mr. **Rosendale**. That is correct.

Mr. **Skeen**. How much of the pork?

Mr. **Rosendale**. Thirty-four percent.

AGENCY-WIDE INFORMATION MANAGEMENT SYSTEM

Mr. **Skeen**. That is a little worrisome. You mentioned your equipment.

How outdated is your equipment compared to other USDA agencies? I think it is almost vital for you to have state-of-the-art equipment.

I know that one of your primary concerns is your personnel but let's talk just about the equipment side of it as far as this budget is concerned.

Mr. **Rosendale**. Would you accept an answer from Mr. Cal Watkins?

Mr. **Skeen**. I will accept. If Calvin wants the ball, we are going to give it to him.

Mr. **Whitten**. Is he a designated pinch-hitter?

Mr. **Watkins**. We have word processors that are three and four generations old. They are not being manufactured any longer.

Mr. **Skeen**. These are machines, not personnel?

Mr. **Watkins**. That is correct. I thank you for clarifying that.

Mr. **Skeen**. You are a fine, venerable organization.

Mr. **Watkins**. We may have some of those broken down, too. We have computers which we presently have 8 and 10 people sharing in the regional offices.

We are interested in getting computers for our investigators. We don't have those at the present time.

The basic automation of word processing, as I mentioned, we have no replacements for those when they start breaking down. We are in vital need of that.

We cannot keep up with the industry that we regulate because they are computerized and possibly in a position to file reports with us electronically but we are not in a position to receive them electronically.

Mr. **Skeen**. With the request in this budget how far can we go in an update mode? I think with enforcement, if you don't have the equipment you cannot be very effective.

Mr. **Watkins**. We can go a long way.

Mr. **Skeen**. With this budget?

Mr. **Watkins**. Yes, the budget we have here. During that fiscal year we can effectively, with that amount of money, put it to good use.

Now I would say that to you in terms of additional resources, later it might be needed to build upon that in terms of training but that would put the equipment where we need it at the present time.

Mr. **Skeen**. Very good.

I would also like to urge you when you consider your data processing and other equipment that you get ahead of the curve. I know personnel has been a primary concern and that ought to come first. But I find too many agencies, that if we are going to rob from some place we take it out of equipment and data processing.

So we coast along with the worst position in a rapidly expanding technological field. We find government is way behind the private sector in this kind of capability.

SCALES AND WEIGHING

In the area of corruption and organized crime, and I mentioned this the last hearing we had, you said 14 of the investigations now are turning up false weights.

Is it that widespread in the overestimate of weights or is this the biggest problem that you have other than the misuse of custodial funds?

Mr. ROSENDALE. In the scales and weighing area, yes, it is.

Mr. SKEEN. Is this deliberate?

Mr. ROSENDALE. Where there is evidence, yes.

Mr. SKEEN. Fourteen percent are prosecutable. You can soak up more water with bull meat than anything in the world but when they go to putting their thumb back on the scale, that gives us a little problem.

You have investigated and prosecuted how many cases?

Mr. ROSENDALE. Fourteen percent of the 481.

Mr. SKEEN. That is close enough.

I have no other questions. I thank you for your responses.

Thank you, Mr. Chairman.

Mr. WHITTEN. Thank you very much.

We all recognize these changes do happen but we need to be kept advised about them, particularly when you need some help.

That makes it easier for us to support you.

We appreciate your testimony. Please keep us advised.

Mr. ROSENDALE. Thank you.

Ms. JO ANN SMITH. Thank you.

BIOGRAPHICAL SKETCH OF VIRGIL M. ROSENDALE

Virgil M. Rosendale is the Administrator of the Packers and Stockyards Administration. Mr. Rosendale was appointed to his present position on February 20. In his present position he oversees policy development and daily operations of the Agency. He brings to the position 30 years experience running a successful livestock operation and leadership experience in the livestock industry.

Mr. Rosendale has managed the operation of a 2,000-acre grain and livestock farm in Augusta, Illinois. He is past president of the National Pork Producers Council (1976-1978), former chairman of the board of the National Livestock Meat Board (1981-1982), and was the first president of the National Pork Board (1986-1989).

His awards and recognitions include the National Hog Farmer Distinguished Service Award (1979), American Meat Institute Animal Agriculture Award (1981), and Master Farmer Award from Prairie Farmer magazine (1983).

Mr. Rosendale graduated from the University of Illinois in 1957 with a bachelor's of science degree in agricultural education. In 1964, he earned a master's of science degree in animal science, specializing in animal genetics and meats.

BIOGRAPHICAL SKETCH OF WILLIAM A. ASHLEY

William A. Ashley is currently Staff Director of the Management Services Staff, Packers and Stockyards Administration, United States Department of Agriculture. In this capacity, he serves as Budget Officer and is responsible for the Agency's support service activities.

Mr. Ashley grew up in a military family. He claims Georgia as his home, where he graduated from Valdosta State College in 1972 with a degree in accounting.

Prior to joining the Agency's Atlanta office in 1976, as an auditor, he held several accounting positions in the private sector. In 1981 he transferred to the Meat Merchandising Branch in Washington. In 1988 he was promoted to his present position.

For release only
by the House
Committee on
Appropriations

PACKERS AND STOCKYARDS ADMINISTRATION
Virgil M. Rosendale, Administrator
before the
House Subcommittee on Rural Development,
Agriculture, and Related Agencies

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to appear before the Subcommittee to discuss the programs of the Packers and Stockyards Administration (P&SA) and the Agency's budget request for fiscal year 1991. First, I would like to introduce two members of the staff who are accompanying me today, Calvin W. Watkins, the Deputy Administrator, and William Ashley, the Agency's Budget Officer.

You and other Members of the Subcommittee are familiar with the traditional programs of the Agency. As you are aware, the mission of the Packers and Stockyards Administration is to assure fair trade practices and competitive markets for livestock, meat, and poultry. The programs of the Agency are designed to foster fair and open competition, guard against deceptive and fraudulent practices, and provide payment protection in the marketing of livestock, meat, and poultry.

In addition to the Packers and Stockyards Act, the Agency is responsible for administering the Clear Title provisions contained in Section 1324 of the Food Security Act of 1985. Additional responsibility was also added when the Packers and Stockyards Act was amended in 1987 by the "Poultry Producers Financial Protection Act" to add statutory trust and payment provisions for poultry similar to those adopted in 1976 for livestock producers.

SCOPE OF OPERATIONS

The production and marketing of livestock, meat, and poultry are important to American agriculture and have a significant impact on the Nation's economy. In 1989, cash farm receipts of livestock and poultry were $57 billion, approximately 36 percent of total receipts. The wholesale value of red meat and poultry in 1989 has been estimated by the Department of Commerce to be approximately $86 billion.

At the end of fiscal year 1989, there were 1,765 posted stockyards; 9,925 registrants, including 7,326 market agencies/dealers and 2,599 packer buyers; approximately 6,500 slaughtering and processing packers; and an estimated 6,900 meat distributors, brokers, and dealers. Of the slaughtering packers, 619 were bonded and those purchasing over $500,000 worth of livestock were also required to file annual reports with the Agency. There are an estimated 250 poultry firms subject to the Act.

PROGRAMS UNDER THE P&S ACT

Livestock, meat, and poultry production and marketing continue to change. Fortunately, the Act is written in a manner which has allowed the Agency to modify its programs and adapt to a changing industry.

The Agency has two major program areas under the P&S Act: Livestock Marketing and Packer and Poultry. It is a goal of the Agency under normal circumstances to allocate its resources on an equal basis between the two major program areas. However, the Agency must maintain allocation flexibility so that it can respond to changing conditions. For example, the current financial problems in the industry require that additional resources be channeled to financial and payment protection activities.

PAYMENT PROTECTION

Payment protection is a major concern to livestock and poultry producers, and it is particularly important to the stability of the farm economy for them to receive full payment when due.

Under these conditions, the Agency again has allocated additional resources and given special priority to the financial area. During fiscal year 1989, 5 auction markets failed financially owing $218,000 for livestock; $187,000 was recovered from bonds and other sources. Also, during the last fiscal year, 16 dealers/order buyers failed owing $1.5 million for livestock, of which about $200,000 was recovered, leaving $1.3 million unpaid.

Since 1985, an average of more than 20 meat packers have experienced financial failure annually. The statutory packer trust provision in the P&S Act contributed significantly to reducing producer losses when the packers failed.

During fiscal year 1989, cash sellers of livestock were paid $1.1 million from 9 packers under the statutory packer trust provision. This brings the total paid to cash sellers to over $32.4 million since the adoption of the trust provisions of the Act in 1976.

In addition to amounts recovered under the trust, proceeds from packer bonds paid $233,000 in 1989.

Since the poultry amendments to the Act became effective, the Agency has investigated nine poultry failures. The poultry trust provision has been helpful in reducing losses to poultry sellers and growers in these cases.

LIVESTOCK MARKETING

The primary responsibilities of the Livestock Marketing Division are to ensure prompt and full payment to livestock producers, prevent unfair trade practices, and foster open competition by stockyards, market agencies, and dealers. The bonding, solvency and custodial account requirements are given top priority to provide maximum payment assurance to livestock producers.

Because of increasing concern about the integrity of custodial funds, the Agency has developed a review program to provide more frequent on-site audits of all custodial accounts. This program will help identify market agencies that are misusing custodial funds and those that cannot make up shortages in the account.

In addition to the payment protection responsibilities, the investigation of fraudulent practices are given a high priority in the livestock marketing program. Emphasis is given to investigation of false weighing, weight and price manipulation, switching of livestock, and misrepresentation of the source, origin, and health of livestock.

Competition in livestock marketing is also a matter of concern. Competition for livestock should be open and free of restrictions. Any practice, agreement, or understanding which excludes potential buyers from bidding in open competition is considered a restraint on competition. Practices which result in the lessening of competition for producers' livestock include apportioning of territories, price agreements or arrangements not to compete, and payoffs or kickbacks to buyers. Information or complaints which indicate a possible restriction of competition are investigated on a priority basis.

PACKER AND POULTRY

The primary responsibilities of the Packer and Poultry Division are to assure prompt and full payment to livestock and poultry producers; to foster open and free competition in the procurement of livestock by packers; and to prevent noncompetitive practices in the marketing of meat and meat products. High priority is given to assuring payment for livestock through bonding, solvency tests, and the statutory trust. The existence of the packer trust has helped reduce losses to producers selling livestock on a cash basis to slaughtering packers.

The poultry amendments to the Act, which became effective February 21, 1988, give similar protection to poultry growers and producers through statutory trust and payment provisions. Regulations have now been published to implement the new statutory trust provisions and live poultry dealers will be filing annual reports for the first time this year.

The poultry program of the Agency continues to take on added significance as a result of the 1987 amendments. The new administrative authority will make administration of the statutory trust and payment provisions more effective and efficient. The Agency, however, will continue to encounter serious delays concerning trade practice violations because administrative procedures cannot be utilized, and enforcement proceedings must be handled through the Federal District Courts, a costly and time-consuming process.

MEAT MARKETING

Commercial bribery and illegal brokerage in the wholesale meat trade continues to require attention, with emphasis on the operations of meat brokers and wholesale meat distributors. Firms making payoffs to meat buyers enjoy a favored position over other suppliers who compete on the basis of service and the products sold. Cases of this nature generally cover broad geographic areas and require a substantial commitment of Agency resources. P&SA works closely with other Government agencies such as the FBI, the IRS, and the Postal Inspection Service in these areas.

Bait-and-switch operations are also a continuing problem. The Agency works with State and local authorities on cases of this nature.

MEAT PACKER CONCENTRATION AND CAPTIVE SUPPLIES

Meat packer concentration, feeding, and forward contracting continue to be a matter of some concern, especially among livestock producers. Concentration accelerated during 1987 and continued into 1988. The top 10 slaughterers of steers and heifers during calendar year 1985 merged into 5 by the end of 1987. Acquisitions have also resulted in the merging of specialized poultry firms and traditional red meat firms. These developments, along with the moves on the part of meat packers to gain captive supplies through feeding and forward contracting, have prompted the Agency to review industry structure and market performance on a continuing basis.

The four largest firms slaughtered 70 percent of total commercial slaughter of steers and heifers in 1988. Boxed beef production by the top four firms was 79 percent of total production. There has been increased concentration with respect to sheep and lambs, with the four largest firms slaughtering 77 percent of the 1988 commercial slaughter. The four-firm concentration ratio for hog slaughter was 34 percent in 1988. The hog slaughter picture, however, is undergoing change at the present time, and an increase in this four-firm concentration ratio is expected as a result of expanded slaughter capacity.

Under the Hart-Scott-Rodino Act, firms, including meat packers, are required to submit premerger notification and information to the Department of Justice and the Federal Trade Commission. P&SA has and will continue to provide analyses, counsel, and information on industry structure, concentration, and other factors to Justice and FTC concerning proposed mergers of meat packers.

The supply situation for both fed and feeder cattle, together with excess plant capacity, will likely continue to minimize any measurable negative effect of concentration and captive supplies in market performance and cattle prices in the foreseeable future. If and when livestock prices drop significantly, however, producers may more seriously focus on the concentration and captive supply issues. At the present time, there definitely seems to be a lack of consensus among livestock producers with respect to the need or advisability for any government involvement to alter the present concentration and integration trends.

FURTHER PROCESSING OF RED MEAT AND POULTRY

The meat processing industry continues to develop and expand beyond the fabrication of red meat into wholesale cuts. Areas of significant expansion include fabricating red meat and poultry into individual portions; manufacturing specialty and convenience items; preparing partially-to-fully cooked and ready-to-serve products; and developing packer branded retail cuts. These developments have far-reaching implications for producers, consumers, and agribusiness firms in the industry. The Agency will continue to stay alert to such changes and modify its programs and priorities accordingly.

The proportion of fed beef which is boxed remained steady in 1988 compared to the previous year.

Boxed beef production accounted for 22.5 million carcass equivalents in 1988, 80 percent of the 28.1 million steers and heifers slaughtered that year.

SCALES AND WEIGHING

The major emphasis of the Agency's scales and weighing program continues to be directed to weighing investigations. Economic and competitive pressures on individuals and firms engaged in livestock marketing contribute to falsifying weights as a way to improve income. During fiscal year 1989, 14 percent of the

Agency's 481 formal weighing investigations disclosed false or questionable weighing. The percentage of cases involving false or questionable weighing has remained relatively constant for the past few years.

In addition to conducting weighing investigations, the Agency actively participates with the National Conference on Weights and Measures and the National Institute of Standards and Technology in the development of standards, specifications, and tolerances for livestock and carcass scales.

The Agency also develops training programs and provides instruction to State weights and measures officials, private scale testing companies, and scale users. During fiscal year 1989, the Agency's 24 formal scale testing workshops provided training for over 200 weights and measures and industry personnel. Five weighmaster training schools conducted by Agency personnel trained 65 scale users in proper weighing procedures and techniques.

CLEAR TITLE

As of January 31, 1990, seventeen States had received certification of their central filing systems under Section 1324 of the Food Security Act of 1985. The States of West Virginia and Wyoming received certification in calendar year 1989. The certification for the State of Arkansas was withdrawn during the year after the repeal of the State's enabling legislation for the central filing system. States previously certified continue to apply for amended certification due to modifications in their systems.

The Agency is continuing to review its procedures for carrying out its responsibilities for certification of central filing systems to determine if it should be providing additional assistance to States operating the systems or if there should be some review of previously certified systems.

AGENCYWIDE INFORMATION MANAGEMENT SYSTEMS (AIMS)

The Agency's progress in implementing its automated information management system has been slow and has now virtually come to a standstill due to lack of resources.

This fiscal year the Agency will be operating on a budget only $160,000 over the 1988 funding level. Increased costs and pay increases have otherwise been absorbed since 1988.

The Poultry Producers Financial Protection Act of 1987 added additional responsibilities to the Agency to provide payment protection and a statutory trust for the benefit of poultry producers and growers. With these additional responsibilities, increased costs and no additional funding, we have been unable to keep pace with the industry we regulate in the areas of automation and computerized technology and techniques.

To correct this situation, funding is needed to develop and implement a fully automated information management system. Such a system is necessary to provide multi-user computer systems for: (1) expanding database applications for registration and bonding of those subject to the Packers and Stockyards Act; (2) enhancing the Agency's ability to monitor the financial condition and debt-paying ability of meat packers; and (3) improving office efficiency by computer generation and control of correspondence and documents through systematic replacement of obsolete word processors.

The system will also provide risk analysis capabilities for identifying financially weak livestock dealers and market agencies. In addition, the Agency investigators would have the capability of accessing an archival file to detect individuals and firms barred from operating in one region who are operating in another.

The Agency at the present time is at critical risk with respect to even basic office automation capabilities. Word processing, the most basic automated capability for daily operation of an office, is being accomplished on obsolete equipment. Should these fail and replacements not be available, time sensitive mailings would require days to complete instead of a few hours.

We must become more efficient and increase productivity if we are to continue to meet increased responsibilities at lowest cost. The technology and techniques are available, and an investment now will provide dividends in the future.

FISCAL YEAR 1991 BUDGET REQUEST

The total budget request of the Packers and Stockyards Administration for fiscal year 1991 is $10,687,000. Included is $10,559,000 for the administration of the Packers and Stockyards Act and $128,000 for Clear Title.

The request includes an increase over 1990 funding of $1,125,000. The additional funding will provide $640,000 for computer hardware, software, development, and training necessary for implementing an Agencywide Information Management System. It also provides $186,000 for additional operating costs and $299,000 to annualize 1989 pay cost increases.

Mr. Chairman, the Agency appreciates the opportunity to present this statement. We welcome the opportunity to respond to any questions you and other members of the Subcommittee may wish to ask.

United States
Department of
Agriculture

Packers and
Stockyards
Administration

Packers and Stockyards Administration Fiscal Year 1991 Budget Review

Packers and Stockyards Administration

Mission: The mission of P&SA is to assure fair trade practices and competitive markets for livestock, meat, and poultry.

The programs of P&SA are designed: (1) to foster fair and open competition, guard against deceptive and fraudulent practices and provide payment protection in the marketing of livestock, meat, and poultry under the Packers and Stockyards Act; (2) for certification of "central filing systems" established by States under Section 1324 of the Food Security Act of 1985.

Packers and Stockyards Administration

Areas of Responsibility

- Payment protection
  - Prompt payment - livestock, poultry and meat
  - Packer and poultry trusts
  - Custodial accounts
  - Bonds
  - Solvency
- Anti-trust activities
  - Competition
  - Conflicts of interest
- Unfair, deceptive, and fraudulent practices
  - White-collar crime
- Clear title
  - Issuing regulations
  - Certifying procedures

Packers and Stockyards Administration

Overview

Size of industry

• Producer receipts livestock and poultry	$57 bil	• **Wholesale value of red meat and poultry**	**$86 bil**

(36% of total cash farm receipts)

Coverage of program

• Scales	4,115	• **Posted stockyards**	1,765
• Packers S&P (619 bonded)	6,500	• **Market agencies/dealers**	7,325
• Other packers	6,900	• **Packer buyers**	2,600
• Poultry firms	250		

Packers and Stockyards Administration

FY 1991 Request - $10.7 Million

Agency Objectives:

- Programs involving payment protection for livestock, bonding, packer trust, and custodial account surveillance maintained
- Major investigations involving fraud, unfair competition and deceptive practices continued
- Programs to assure accurate scales and weighing maintained
- Development of the Agency's information management system to improve productivity and efficiency
- Carry out the payment and statutory trust provisions of the Poultry Producers Financial Protection Act of 1987
- Certification of the "clear title" systems established and implemented under the Food Security Act of 1985 continued
- Coordination with and assistance to other federal law enforcement agencies provided

PACKERS AND STOCKYARDS ADMINISTRATION

Purpose Statement

The Packers and Stockyards Administration was reestablished by Secretary's Memorandum No. 1000-1, of June 17, 1981. The Agency administers the Packers and Stockyards Act of 1921, as amended, and carries out the Secretary's responsibilities under Section 1324 of the Food Security Act of 1985 covering "central filing systems" established by States for pre-notification of security interests against farm products. The Agency also has responsibility with respect to persons and firms subject to the Packers and Stockyards Act for the Truth-in-Lending Act, the Fair Credit Reporting Act and the Freedom of Information Act.

The principal purpose of the Packers and Stockyards Administration programs is to assure the integrity of the livestock, meat, and poultry markets and the market place. This includes fostering fair and open competition and guarding against deceptive and fraudulent practices which affect the movement and price of meat animals and the products therefrom. The work of the Agency is also aimed at protecting consumers and members of the livestock, meat and poultry industries against unfair business practices which can unduly affect meat and poultry distribution and prices.

The Food Security Act of 1985 permits the States to establish "central filing systems" for the purpose of pre-notifying buyers, commission merchants, and selling agents of security interests against "farm products". It is the responsibility of the Packers and Stockyards Administration to issue regulations and to certify those systems which meet the criteria set forth in the statute.

Headquarters of the Agency is located in Washington, D.C., with 12 regional offices located in Atlanta, Georgia; Bedford, Virginia; Denver, Colorado; Fort Worth, Texas; Indianapolis, Indiana; Kansas City, Kansas; Lancaster, Pennsylvania; Memphis, Tennessee; Omaha, Nebraska; Portland, Oregon; Sacramento, California; and South St. Paul, Minnesota. As of September 30, 1989, there were 179 full-time permanent and 8 other employees. Of the total, 45 full-time employees and 1 other employee worked in the Headquarters office; 134 full-time employees and 7 other employees worked in the regional offices.

PACKERS AND STOCKYARDS ADMINISTRATION

Available Funds and Staff-Years

1989 Actual and Estimated, 1990 and 1991

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Packers and Stockyards Administration	$9,562,000	183	$9,562,000	187	$10,687,000	187

Full-time Equivalent Staff-Years:	1989 Actual	1990 Estimated	1991 Estimated
Ceiling	183	187	187
Non-Ceiling	--	--	--
Total	183	187	187

PACKERS AND STOCKYARDS ADMINISTRATION

Permanent Positions by Grade and Staff-Year Summary

1989 Actual and Estimated 1990 and 1991

Grade	1989			1990			1991		
	Headquarters	Field	Total	Headquarters	Field	Total	Headquarters	Field	Total
ES-5	1	--	1	1	--	1	1	--	1
ES-3	1	--	1	1	--	1	1	--	1
GS/GM-15	3	--	3	3	--	3	3	--	3
GS/GM-14	8	--	8	8	--	8	8	--	8
GS/GM-13	13	12	25	13	12	25	13	12	25
GS-12	2	39	41	2	41	43	2	41	43
GS-11	3	41	44	3	42	45	3	42	45
GS-9	2	11	13	2	11	13	2	11	13
GS-8	1	--	1	1	--	1	1	--	1
GS-7	2	16	18	2	16	18	2	16	18
GS-6	7	7	14	7	7	14	7	7	14
GS-5	1	11	12	1	11	12	1	11	12
GS-4	1	4	5	1	4	5	1	4	5
GS-3	1	--	1	1	1	2	1	1	2
GS-2	--	--	--	--	--	--	--	--	--
Total Permanent Positions	46	141	187	46	145	191	46	145	191
Staff Years:									
Ceiling	45	138	183	46	141	187	46	141	187
Non-Ceiling	--	--	--	--	--	--	--	--	--
TOTAL	45	138	183	46	141	187	46	141	187

PACKERS AND STOCKYARDS ADMINISTRATION

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

	1989	1990	1991
Personnel Compensation:			
Headquarters	$1,941,899	$2,414,160	$2,057,832
Field	4,345,564	4,131,658	4,774,968
11 Total personnel compensation	6,287,463	6,545,818	6,832,800
12 Personnel benefits..	1,249,927	1,003,307	1,259,600
13 Benefits for former personnel	1,500	1,000	2,000
Total Personnel Comp. and Benefits	7,538,890	7,550,125	8,094,400
Other Objects:			
21 Travel	541,193	577,500	607,000
22 Transportation of things	107,337	120,000	120,000
23.2 Rental Payments to others	239,431	269,000	270,000
23.3 Communications, utilities, and misc. charges	320,249	363,000	405,000
24 Printing and reproduction	25,517	25,000	28,000
25 Other services	587,760	561,475	581,600
26 Supplies and materials	108,728	55,600	148,000
31 Equipment	41,201	40,300	433,000
43 Interest & dividends..	142	--	--
44 Refunds..............	--	--	--
Total other objects ...	1,971,558	2,011,875	2,592,600
Total direct obligations.	9,510,448	9,562,000	10,687,000
Position Data:			
Average Salary, ES positions	$76,750	$79,513	$81,104
Average Salary, GM/GS positions	$33,761	$34,967	$35,905
Average Grade, GM/GS positions	10.27	10.32	10.36

PACKERS AND STOCKYARDS ADMINISTRATION

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Packers and Stockyards Administration:

> For necessary expenses for administration of the Packers and Stockyards Act, as authorized by law, and for certifying procedures used to protect purchasers of farm products, including field employment pursuant to section 706(a) of the Organic Act of 1944 (7 U.S.C. 2225), and not to exceed $5,000 for employment under 5 U.S.C. 3109, [$9,562,000] $10,687,000.

SALARIES AND EXPENSES

Appropriation Act, 1990	$9,562,000
Budget Estimate, 1991	10,687,000
Increase in Appropriation	1,125,000

SUMMARY OF INCREASES AND DECREASES
(On basis of appropriation)

Item of Change	1990 Estimated	Pay Costs	Program Changes	1991 Estimated
Administration of the Packers and Stockyards Act	$9,434,000	+$299,000	+$826,000	$10,559,000
Certification of "Clear Title"......................	128,000	--	--	128,000
Total Available	9,562,000	+ 299,000	+ 826,000	10,687,000

PROJECT STATEMENT
(On basis of appropriation)

	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
1. Administration of the Packers and Stockyards Act..........	$9,382,448	180	$9,434,000	184	+$1,125,000	$10,559,000	184
2. Certification of Clear Title.......	128,000	3	128,000	3	--	128,000	3
Unobligated balance	51,552	--	--	--	--	--	--
Total appropriation .	9,562,000	183	9,562,000	187	+ 1,125,000	10,687,000	187

EXPLANATION OF PROGRAM

The Packers and Stockyards Administration (P&SA) administers the Packers and Stockyards (P&S) Act (7 U.S.C. 181-229). The Agency also carries out the Secretary's responsibilities under Section 1324 of the Food Security Act of 1985 covering "central filing systems" established by States for pre-notification of security interests against farm products. In addition, the Agency administers the Truth-in-Lending Act (15 U.S.C. 1601 et seq); the Fair Credit Reporting Act (15 U.S.C. 1681 et seq); and the Freedom of Information Act (5 U.S.C. 552) as these statutes apply to persons and firms subject to the P&S Act. Agency programs are designed to assure the integrity of the livestock, meat and poultry markets and the marketplace. Other functions of the Agency include assuring prompt payment to producers for livestock and poultry, and assuring nondiscriminatory marketing charges and accurate weights. The Agency's programs also include protecting consumers from unfair business practices in the marketing of meat.

Coverage of Program:

	1989 Actual	1990 Estimated	1991 Estimated
Investigations	2,169	2,200	2,200
Market Agencies/ Dealers Registered	9,925	9,700	9,700
Stockyards Posted	1,765	1,775	1,775
Slaughtering and Processing Packers Subject to the Act (estimated)	6,500	6,500	6,500
Distributors, Brokers, and Dealers Subject to the Act (estimated)	6,900	6,900	6,900
Poultry Operations Subject to the Act	250	250	250

The wholesale value of livestock, meat, and poultry subject to the Act is $86 billion each year.

The principal activities carried out in administering the Act are:

- Investigating trade practices of packers, market agencies, and dealers to detect fraudulent transactions and to guard against unfair trade practices detrimental to producers and the industry.

- Investigating packer meat merchandising and chain store buying practices in order to maintain prices established by fair and competitive marketing practices.

- Investigating the financial condition and payment practices of market agencies, dealers, and packers subject to the Act to determine if they are financially sound and capable of meeting their obligations.

- Maintaining the integrity of the statutory trust for cash sellers of livestock and poultry.

- Surveillance of marketing at public markets and geographical area markets to foster and maintain fair and effective competition and avoid conflicts of interest.

- Obtaining adequate surety bonds from auction operators, commission firms, dealers, and packers (purchasing more than $500,000 of livestock annually) to assure payment for livestock purchased.

- Investigating poultry marketing practices to identify and correct those which are injurious to producers and operators in the industry.

JUSTIFICATION OF INCREASES AND DECREASES

(1) An increase of $1,125,000 for pay and increased operating costs, and development and implementation of an Agencywide Information Management System consisting of:

(a) An increase of $640,000 for development of an Agencywide Information Management System.

Need for change. The Agency is behind in its automation and computerization efforts. Further automation and development will provide for increased efficiency to meet increased responsibilities.

Nature of change. This increase will fund the purchase of automated equipment and provide for corresponding maintenance, software, communications, and employee training/travel requirements to effectively track registrants, perform financial analyses, and conduct industry surveillance activities designed to prevent financial failures. Specifically, funds would be used to develop and provide multiuser computer systems to: (1) expand database applications for registration and bonding (REGMOD); (2) automate the Agency's Debt Paying Ability Analysis (DEPA) capability for monitoring packers' financial conditions; and (3) improve office standardization and efficiency by computer generation and control of correspondence and documents through systematic replacement of obsolete word processors.

Present equipment is inadequate in number and capability to provide for registrant database access by Agency investigators, resulting in continued maintenance and use of cumbersome manual card files, duplication of effort, and resistance to the entire computerization effort.

Increased automation would also provide risk analysis capabilities for identifying financially weak livestock dealers and market agencies and a centralized archival file of inactive registrants to help detect individuals barred from operating in one region who attempt to register in another.

(b) An increase of $186,000 for additional operating costs on non-salary items.

The increase will provide for operating cost increases and maintain staffing at the current level.

(c) An increase of $299,000 for annualization of 1989 pay raise. The 1991 pay raise and the total 1990 pay raise are being absorbed.

PACKERS AND STOCKYARDS ADMINISTRATION
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 and Estimated 1990 and 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
D.C. Headquarters	$3,549,811	45	$3,367,957	46	$3,861,172	46
REGIONAL OFFICES:						
California	384,140	8	431,166	9	479,530	9
Colorado	427,721	10	411,552	10	445,730	10
Georgia	522,295	11	489,619	11	576,980	11
Indiana	583,884	13	584,598	14	661,630	14
Kansas	450,011	11	529,248	11	572,448	11
Minnesota	579,145	13	598,555	13	637,030	13
Nebraska	606,131	13	624,615	13	672,530	13
Oregon	369,865	9	392,926	10	434,330	10
Pennsylvania	530,285	13	531,327	13	607,330	13
Tennessee	536,666	12	533,317	12	582,830	13
Texas	503,874	13	566,190	13	617,730	12
Virginia	466,620	12	500,930	12	537,730	12
Total, Available or Estimate	9,510,448	183	9,562,000	187	10,687,000	187

PACKERS AND STOCKYARDS ADMINISTRATION

STATUS OF PROGRAM

Current Activities: The Packers and Stockyards (P&S) Act of 1921 (7 U.S.C. 181-229) is administered to assure free and open competition, fair trade practices, and financial protection to the livestock, meat, and poultry industries. The objectives of the P&S Act are to protect producers, consumers, and competitors against unfair, deceptive, or discriminatory practices as well as those that are predatory or monopolistic in nature. The Agency also carries out the Secretary's responsibilities under Section 1324 of the Food Security Act of 1985 covering "central filing systems" established by States for prenotification of security interests against farm products. Specific areas to which efforts are now being directed are:

1. Payment Protection: It is a vital concern of the Agency that livestock producers receive payment for the livestock they market. Accordingly, the area of payment protection will continue to receive high priority in work planning and allocation of Agency resources. Particular emphasis will be placed on serious insolvencies, prompt payment and financial frauds. The Agency will continue to investigate failure to pay for meat and poultry and remain actively involved in statutory trust matters and bonding activities.

2. Livestock Marketing: One of the most serious violations of the Act is the use of fraudulent practices in marketing livestock. Emphasis will be given to investigating frauds which involve direct marketing of livestock; such as, false weighing, weight and price manipulation, livestock switching, and misrepresentation as to the source, origin, and health of livestock.

   Competition for livestock, either in direct trading or at public markets, should be open and free of restrictions. Any practice, agreement, or understanding which excludes potential buyers from bidding in open competition would be considered a restraint on competition. Practices which result in the lessening of competition for producers' livestock include apportioning of territories, price agreements or arrangements not to compete, and payoffs or kickbacks to buyers. Therefore, any information which indicates a possible restriction of competition will continue to be investigated on a priority basis.

3. Competition and Conflicts of Interest: The Agency continually monitors changes in industry structure and in cooperation with the Justice Department, Anti-trust Division, acts to fulfill its responsibilities with regard to concentration and potential competitive restrictions. Proposals by packers to vertically integrate market agency and/or custom feeding activities are reviewed to prevent conflicts of interest and maintain competition.

4. Meat Marketing: The Agency continues to place emphasis on commercial bribery in the wholesale meat industry. Bribes are given for the purpose of obtaining or retaining accounts and for preferential pricing or other favored treatment. Legitimate operators are put at a serious disadvantage, since competition based on quality, price and service is instead based on the amount of the bribe.

   Bait-and-switch freezer meat operators continue to be a concern to the Agency. The Agency's policy of referring complaints to state and local authorities, and working with them during the investigative stages, continues to be a satisfactory arrangement. To further this relationship, Agency personnel participated in a national meeting on fraud in bulk meat sales sponsored by the State of North Carolina. The purpose of the meeting was to set up a nationwide information exchange system between the states and federal agencies to assist in curbing bait-and-switch practices.

5. Scales and Weighing: Major emphasis is directed toward detecting inaccurate or fraudulent weighing of livestock and meat through a program of investigating the weighing activities of subject firms. Investigative procedures and frequencies are changed, as necessary, to relate to different or changing marketing methods and conditions.

   The condition of scales used by subject firms is monitored by Agency personnel through review and analysis of scale test data submitted to the Agency's regional offices on required periodic scale test reports. This review and analysis program serves to identify scales which may be unreliable due to excessive wear or improper maintenance. This process also serves to identify testing agencies which are not performing adequate or proper tests so that training can be provided to such agencies. Agency personnel work with scale manufacturers, weights and measures officials, and the National Institute of Standards and Technology to ensure all weighing systems are reliable.

6. Drug Residues: The Agency is continuing to work with other Federal agencies in a cooperative effort to control the marketing of livestock treated with antibiotics and sulfa drugs. A representative of the Agency regularly attends the bi-annual Tissue Residue Program Planning Sessions for the Northeastern Region in Annapolis, Maryland. This group involves State veterinarians from Delaware, Maryland, Pennsylvania, Virginia and West Virginia, along with representatives of Food and Drug Administration (FDA) and Food Safety and Inspection Service (FSIS). The Agency participates in monthly meetings of the Inter-Agency Residue Control Group and has a representative working with the Calf Antibiotic and Sulfa Test Task Force recently formed to make recommendations to the FSIS Docket Committee.

7. Poultry: In February 1988, the Poultry Producers Financial Protection Act of 1987 (Pub. L. 100-173) became effective. This legislation increased the Agency's responsibilities by amending the P&S Act to provide prompt payment and trust protection to poultry growers and sellers.

SELECTED EXAMPLES OF RECENT PROGRESS

1. Payment Protection: The P&S Act provides comprehensive financial protection to cash sellers of livestock to packers. The Agency program to carry out these provisions and activities to prevent losses to livestock sellers receives top priority. Annual reports of packers are analyzed with insolvent packers required to improve their working capital either by adding current assets and/or reducing current liabilities. During the most recent fiscal year, insolvent packers improved their working capital by $1.7 million.

   During fiscal year 1989, 43 compliance audits for solvency were conducted of dealers and market agencies. After being audited, seven businesses decreased the amount of their insolvencies by a total of $3,003,810.

2. Packer Trust: Since the 1976 amendments to the P&S Act, cash sellers of livestock have been paid $32.4 million under the statutory trust provision. During the 1989 fiscal year, 9 packer firms paid out over $1.1 million. Twenty-three packer trust investigations were conducted during fiscal year 1989.

3. Live Poultry Trust: A statutory trust provision for live poultry growers and sellers became effective in February 1988. Since that time, the Agency has investigated five poultry failures, with three resulting in payment of $86,891 to poultry growers.

4. Clear Title: During fiscal year 1986 regulations were issued to implement Section 1324 of the Food Security Act of 1985 covering "central filing systems" established by States for pre-notification of security interests against farm products. As of October 24, 1989, 18 States applied for and received certification of their central filing systems. One certification was subsequently withdrawn due to the State's failure to pass enabling legislation.

5. Financial Frauds: Check-kiting schemes by auction markets and dealers continue to be uncovered. These schemes are created to cover cash shortages and when they collapse, banks, livestock sellers or both may suffer financial loss. During fiscal year 1989, two separate check-kiting investigations were concluded; one involving an auction market in Kansas, the other involving two operators of an auction market in Missouri. The market operator in Kansas has agreed

to divest himself of his ownership and management interest in the market and a 2-year suspension of his registration.

Other P&S financial fraud investigations have resulted in criminal charges by State authorities. In a Missouri case concerning payment for livestock with bad checks, a livestock dealer has been sentenced to one year in the county jail. In another case, a South Dakota livestock dealer is under indictment in Iowa for issuing bad checks in payment for livestock and is awaiting sentencing for criminal contempt in South Dakota stemming from violations of a USDA order. A former auction market operator in Nebraska has been charged with theft by deception in a cattle transaction.

6. Frauds in Livestock Marketing: The Agency currently has 12 formal cases pending that involve weight and/or price manipulation by dealers and market agencies buying livestock on commission. Such cases are given high priority by regional personnel in their investigative activities because these fraudulent practices cause serious, direct harm to livestock producers.

7. Commercial Bribery and Illegal Brokerage: During fiscal year 1989, three administrative complaints were issued alleging commercial bribery. One case involved a broker giving bribes to a national chainstore buyer and also kicking back to a salesman of a national meat packer. In another situation, a broker and the president of a firm selling imported lamb had an arrangement whereby the president of the lamb firm approved so-called advertising payments to the broker, who in turn retained a portion of the funds and passed the majority back to the president of the lamb firm. In addition, the broker made payoffs of over $230,000 to two northeast chainstore buyers without the knowledge of their employers. The third case also involved payoffs to two northeast chainstore meat buyers by a broker. Civil penalties amounting to $103,000 have been assessed in these three actions with settlement pending against the broker in the case involving the lamb firm.

   In a criminal action, the former sales manager for a large poultry firm and a broker in the northeast pled guilty to defrauding the poultry firm in connection with a bribery scheme. The two individuals made restitution to the poultry firm of over $200,000 in exchange for $500 in fines and suspended sentences.

8. Unfair Competitive Practices: During fiscal year 1989, an investigation was started which involves two dealers purchasing cattle for a fast food chain in the southwest. It appears bribery payments are being paid to one and possibly two officers of the fast food chain. This

investigation is continuing. Regional offices have placed several auction market owners on notice for speculating out of consignments and various unfair business-getting practices.

9. Scales and Weighing Activities: About 475 weighing investigations were conducted in fiscal year 1989, slightly fewer than were conducted in fiscal year 1988. Fourteen and one-half percent of the investigations disclosed false weighing. This represents a slight increase from the 13 percent found in fiscal year 1988.

   The Agency has conducted three training schools, providing instructions in testing livestock scales, under the National Training Program of the National Conference on Weights and Measures. A total of 61 persons from 8 States and the Navajo Indian Nation, together with P&SA Industrial Specialists from the regional offices, participated in these training schools and have been certified by the National Conference as to their qualification for testing livestock and animal scales.

   Three formal cases were completed in fiscal year 1989 imposing civil penalties up to $20,000 and suspensions up to 18 months for false weighing. One of these cases, involving a South Carolina auction market and dealer, is on appeal to the Circuit Court of Appeals. The sanction imposed in the case of a Tennessee auction market and dealer was upheld on appeal to the Circuit Court of Appeals.

10. Packer Bonding: All packers purchasing in excess of $500,000 worth of livestock annually must be bonded.

Packer Bonding Activity

Value of bonds ($ in millions)	271.1
Number of packers bonded 9/30/89	619
Number of packer bonds called on in fiscal year 1989	11
Value of packer bonds called on ($ in thousands)	1,065

During the 1989 fiscal year, 1.8 percent of the packer bonds had claims filed for nonpayment of livestock. The value of bonds called on represents less than one percent of the total bond coverage value.

For the fiscal years 1980 through 1989, the average yearly bond claims paid represent less than two-tenths of one percent of the average yearly bond coverage. This is primarily due to the success of the statutory trust provision.

11. Drug Residues: Regional offices of the Agency cooperate with FSIS and FDA investigators in tracing back hogs, baby calves and downer cows that have violative levels of drug residues showing up at slaughter.

12. Registration: The Act and regulations require that each market agency and dealer operating in commerce be registered. To comply, a firm must file an application simultaneously with a surety bond or its equivalent.

Registration/Bonding Activity

Market agencies/dealers registered and bonded	7,326
Value of registrants' bonds ($ in millions)	280.4
Packer buyers - registered only	2,599

During fiscal year 1989, 78 claimants were paid $266,713 from bond proceeds when dealers and market agencies failed financially.

FRIDAY, MARCH 9, 1990.

OFFICE OF TRANSPORTATION

WITNESSES

JO ANN SMITH, ASSISTANT SECRETARY FOR MARKETING AND INSPECTION SERVICES

MARTIN F. FITZPATRICK, JR., ADMINISTRATOR, OFFICE OF TRANSPORTATION

WESLEY R. KRIEBEL, DEPUTY ADMINISTRATOR

LEE H. KEELY, RESOURCE MANAGER

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Mr. WHITTEN. In this area we have long-time experience. We feel that the attention that we have given to the Office of Transportation sometimes has been at the committee's insistence, but it has worked out well. Mr. Fitzpatrick, we are glad to have you here.

Ms. SMITH. Thank you, Mr. Chairman, it is a pleasure to be here. I don't think that you or Congressman Skeen need any introduction to OT and its function. Therefore, I will delete any remarks I might have and just say it gives me pleasure to introduce Buzz Fitzpatrick, the OT Administrator.

Mr. WHITTEN. Thank you very much.

We will be glad to hear from you.

Mr. FITZPATRICK. Thank you, Mr. Chairman.

It is a pleasure once again to appear before your committee and present our comments about transportation.

With me today are Dr. Wesley R. Kriebel, Deputy Administrator, Office of Transportation, and Lee H. Keely, Resource Manager, Office of Transportation.

I respectfully request that my formal statement be included in the record and I will summarize my comments with your permission.

Mr. WHITTEN. Without objection.

[CLERK'S NOTE.—Mr. Fitzpatrick's written statement appears on pages 210 through 219. The Office of Transportation explanatory notes appear on pages 220 through 236.]

FY 1991 BUDGET PROPOSAL

Mr. FITZPATRICK. In 1991 we propose to increase funding for OT from $2,397,000 to $2,429,000.

OT, as you know, Mr. Chairman, is the only agency in the Federal Government that represents the transportation concerns of agriculture and rural America. I would like to mention a few things we have done recently that probably would not have been done had there not be a transportation function in the Department of Agriculture.

SHIPPING ACT OF 1984

First, Mr. Chairman, we have worked with the international trade issues and specifically the Shipping Act of 1984. A major goal of the USDA is to ensure that U.S. agriculture products can compete fairly in world markets.

The Shipping Act of 1984 regulates the ocean liner industry which carries over $14 billion worth of agriculture products annually.

The law provides for a comprehensive review after five years, and that review will be coming up next year.

Mr. **Whitten**. Let me interrupt. I am a little hard of hearing but when I was a district attorney I stood far away from the witness so he could talk to the jury. You are talking into the mouthpiece.

Mr. **Fitzpatrick**. All right, sir.

The Office of Transportation filed comments in two proceedings before the Federal Maritime Commission in support of loyalty contracts and simplified rate making for agricultural producers. The office also sponsored three hearings, and proceedings were published in 1989 and widely distributed to Congress and to policymakers throughout the Federal Government.

An advisory commission on conferences that regulate the movement of our produce and commodities to the Pacific Rim countries and other export markets is currently under formation, with an emphasis on agricultural issues. Secretary Yeutter has made his concerns clear to the White House that he would like an agricultural representative, and there will be one.

The conclusion I have about the shipping act and our related work on international programs is that without our efforts many of the livestock, lumber and other agricultural interests would not be represented properly.

GRAIN HOPPER CARS

I would like to address another major problem briefly, Mr. Chairman. That is the availability of covered hopper cars for the movement of grain.

In recent years almost no new grain cars have been added to the nation's rail car fleet for the movement of grain. This led to concern and debate over the ability of the U.S. rail system to meet future transportation needs. In 1989, USDA published a report which quantified the likely supply and availability of rail cars for grain in future years.

We will continue this effort with an emphasis on finding market solutions which strike a balance between the interests of the railroad industry and the interests of the grain industry, and which let both sides share the risks and rewards of rail car investments.

HAULING FOOD AND HAZARDOUS MATERIALS

An emotional issue we worked on which I think requires a levelheaded address began with the national publicity last spring concerning the hauling of municipal trash and hazardous materials in the same vehicles that were used to haul food.

This is a big concern, a very serious one. USDA through the Office of Transportation convened a series of three interagency coordinating meetings in June 1989. We had the Food Safety and Inspection Service, the Environmental Protection Agency, the Department of Transportation, the Interstate Commerce Commission, and the Food and Drug Administration.

The consensus was that the best approach available under existing law was to promote a voluntary solution through education of the shipping public as well as exerting the existing regulatory authorities on the problem. There were no direct legislative authorities for prohibiting the practice; but there were some efforts that we could make in USDA and in the other agencies; and we did those.

We will continue to respond to this issue as it is not resolved fully.

MEXICO

We have worked very closely, Mr. Chairman, with Mexico. They are one of the U.S.'s biggest markets for agricultural products especially grains. I will supply additional information on trade with Mexico for the record.

[The information follows:]

U.S. Agricultural and Non-agricultural Total Exports, Imports, and Trade Balance

MEXICO

ITEM	1984	1985	1986	1987	1988
		MILLION DOLLARS			
EXPORTS					
Agricultural	1,993	1,436	1,084	1,200	2,234
Non-agricultural	9,468	11,648	10,841	12,845	17,620
Total	11,461	13,084	11,925	14,045	19,854
IMPORTS					
Agricultural	1,278	1,446	2,080	1,867	1,820
Non-agricultural	16,484	17,492	15,116	17,899	20,798
Total	17,762	18,938	17,196	19,766	22,618
TRADE BALANCE					
Agricultural	715	-10	-996	-667	414
Non-agricultural	-7,016	-5,844	-4,275	-5,054	-3,178
Total	-6,301	-5,854	-5,271	-5,721	-2,764

Source: U.S. Bureau of Census

U.S. Agricultural Exports to Mexico, 1984 through 1988

Commodity	1984	1985	1986	1987	1988
			METRIC TONS		
Corn	2,688,152	1,632,833	1,433,986	3,333,147	3,575,708
Sorghum	2,162,503	1,733,230	507,312	688,268	1,290,958
Soybeans	1,576,293	962,929	823,087	1,042,632	1,176,516
Sunflower Seed	542,959	228,107	284,733	210,101	144,384
Soybean Oilcake & Meal	49,050	82,174	108,009	50,562	332,299
Tallow	110,315	114,866	104,405	164,690	163,720
Sunflower Seed Oil	8,770	43,802	120,880	33,465	35,786
Cottonseed Oil	207	253	9,319	3,102	8,223
Lard	28,599	35,557	41,603	43,017	49,405
Wheat	21,017	62	5,799	113,353	842,862
Oats	690	724	9,934	4,527	507
Soybean Oil	88,315	37,580	38,331	20,755	16,403
Rye	403	1,559	2,964	1,870	2,782
Barley	5,318	4,853	3,085	601	4,890
Dry Beans	655	34,221	112,235	31,382	6,529
Cottonseed	53,213	42,830	4,631	14,387	36,279
Corn Oil	12,289	1,179	22,175	4,139	2,713
Subtotal	7,348,748	4,956,759	3,632,488	5,759,998	7,689,964
Other	360,242	401,801	339,119	411,713	757,906
Total	7,708,990	5,358,560	3,971,607	6,171,711	8,447,870

Source: U.S. Bureau of the Census

Mr. WHITTEN. Did you say supply or market? Our records show two or three years ago 640-some odd truckloads of Mexican fruits and vegetables came into the U.S. at one border crossing. Did you say supplier or market?

Mr. FITZPATRICK. It is a two-way street.

Mr. WHITTEN. Trade is something for something. We are letting all these folks unload on us and they turn their noses up about letting us send things to them.

Mr. FITZPATRICK. We shipped about 13 million metric tons.

Mr. WHITTEN. How much less is that than they ship us?

Mr. FITZPATRICK. Actually we ship more to them.

Mr. WHITTEN. What are the facts then?

Mr. FITZPATRICK. I am responsible to make sure that the stuff can move across the border into Mexico.

Mr. WHITTEN. You don't have anything to do with what they do to us?

Mr. FITZPATRICK. No. I am curious.

Mr. WHITTEN. Do you read the newspapers?

Mr. FITZPATRICK. They suggest there is a lot of produce coming in from Mexico.

Mr. WHITTEN. Mexico is contributing to our imports and trade deficits?

Mr. FITZPATRICK. They suggest that in the papers, yes, sir.

Mr. WHITTEN. You are not charged with any trade policies. We seem to be on a one-way street. We have an open door policy for imports.

Our Secretary goes around and talks to other countries about what we can do to help them. All this is a matter of record.

GRAIN CARS

I notice here that you have had problems with grain cars—railroad cars to handle grain. There are many problems I see with agriculture. In my area which is mostly cotton, soybeans, et cetera, anyone in the ginning business has to have enough transport to ship everything he has in a few weeks or it sits there the rest of the year.

During the season it is impossible to have enough railroad cars. But from the railroad's standpoint they sit there most of the year.

It is my understanding that railroad companies aren't buying any new cars. You mentioned before that maybe the Canadian cars could be used. What is the story?

Mr. FITZPATRICK. We asked the U.S. Customs agency to waive restrictions to allow 500 cars from Canada to come into the United States for emergency use two weeks ago.

Mr. WHITTEN. Is it working out all right?

Mr. FITZPATRICK. Yes, sir, very well.

RURAL ROADS

Mr. WHITTEN. May I point your attention to something I noticed in a report on the Farmers Home Administration. The U.S. Office of Transportation reported, of 2.6 million miles of rural roads, one-third is classified as barely adequate or worse. There are 470,000 bridges over 20 feet long of which half are structurally or functionally deficient and one-third are classified as intolerable or worse.

Next door we have the Subcommittee on Public Works. They call it Energy and Water, but it is Public Works. The budget sent down here for that subcommittee had instructions for no new starts for public works projects. No new starts. Yet in another subcommittee we look at foreign aid where the Administration wants us to give money to foreign countries for those things we won't do in our own country.

Something has to give. We are running about $170 billion in the red in trade. They hope Gramm-Rudman will take it down to $140 billion.

For 48 years a farmer could get his income from the buyer. Now he has to look to a government check and they call it subsidy.

This year in the Cooperative State Research Service budget request they ask for about $100 million in competitive research and give it to universities in the country instead of having the department do the work. This is very, very serious.

For 14 years we had revenue sharing and revenue sharing had 39,000 taxing units participating. In 1983, President Reagan called on the Congress to do something because we were in the recession. This committee had to handle it. We called together the subcommittee Chairmen and had them bring to us what had been justified by witnesses but not funded. Starting with that we came up with the Jobs Bill which bailed out the country economically.

Our countries wealth is not in money. The Federal Reserve is printing the money without any backing and is done to take care of things for the moment but in the long run it adds to inflation.

Now we killed the revenue sharing. The country is in a desperate situation, in my opinion. I want to compliment you for that statement because it is true.

You cannot change it but you can give us the facts.

Mr. **Fitzpatrick**. Thank you, Mr. Chairman.

Mr. **Whitten**. Whatever the facts are, we have to face them and go from there. We can argue about what caused it but we have to deal with it as it is.

I want to say thank you for making that information available.

RAIL CAR SHORTAGE

For several years now the Office of Transportation has been telling the Committee about a severe shortage of covered hopper rail cars designed for transporting grain. In early February the Office of Transportation announced that, in connection with the Soo Line Railroad, you petitioned the United States Customs Service to allow the company to bring in Canadian cars duty free. You have indicated that without the waiver, the cost of using the Canadian cars would have been raised to a prohibitive level. In some detail, please describe for us just exactly how short the U.S. railroad system is and provide information on what the cost to bring the Canadian cars through would have been without the waiver of duty.

Mr. **Fitzpatrick**. Analysis by my Agency suggests that, even with significant improvements in grain car utilization, grain car shortages are likely to plague the grain industry throughout the

1990's unless additions are made to the fleet. We expect rail grain movements to gradually trend upward in the 1990's, driven by increases in both domestic and export grain movements. The volume of U.S. grain moved by rail could increase by as much as 20 percent during this decade. Given the natural attrition of the grain car fleet, about 2,700 grain cars will have to be added each year during the 1990's to avoid serious shortfalls in available rail grain equipment.

In a letter dated January 30, 1990, a request was made by my agency to the U.S. Customs Service, in conjunction with a petition by the Soo Line Railroad Company, which sought a waiver of tariff duty on Canadian-built covered hopper cars. Our request for a waiver was made to help alleviate a severe car shortage that was evident to us in the Soo Line territory. The importation of 500 covered hopper cars duty free for a period not to exceed 6-months was granted by U.S. Customs based upon our assessment of the current car supply situation. U.S. Customs said the tariff duty could have amounted to $3 million. The Soo Line said the short term lease would be too costly and not practical without the waiver.

My agency also wrote the Office of the U.S. Trade Representative in August 1989, requesting an accelerating phase-out of the duty on rail jumbo covered-hopper cars and on locomotives. However, the final lifting of these restrictions would have only limited long-term impacts on the availability of covered hopper grain cars in this country.

Although it has been suggested that Canadian covered hopper cars could be placed into service in the U.S. during slack Canadian movement periods, the reality is the peak demand periods in Canada, to a great extent, coincide with peak demand periods in the U.S.

Regardless of grain movement patterns, ownership of the Canadian grain car fleet likely presents the greatest obstacle to the use of Canadian railcars on U.S. railroads. The Canadian grain car fleet consists of approximately 23,500 railcars. Roughly 4,500 of these cars are boxcars that are not suitable for loading and unloading at U.S. facilities. The remaining 19,000 cars are covered hopper cars, of which the Canadian government owns 15,000, the Canadian Wheat Board owns 2,000, and two provincial governments each own 1,000 cars. Given that these cars were purchased with public funds to ensure that Canadian export commitments can be met, it is unlikely that such cars would be made available for service in U.S. grain markets. In fact, the Canadian Government is concerned that shortages of railcars in the U.S. will ultimately affect its ability to move Canadian grains. In recent years the Canadian railroads have augmented their government's grain car fleet with as many as 6,000 covered hopper cars leased seasonally from U.S. companies. With tight supplies of covered hopper cars in the U.S., this additional capacity may no longer be available for Canadian grain shipments.

For these reasons, we do not see a reduction in tariff and duty requirements as being much of a long-term solution to the U.S. grain car supply problem. Any real solution to the problem will not come from sources outside of this country.

TRANSPORTATION HANDBOOKS

Mr. WHITTEN. Last year, Mr. Fitzpatrick, you indicated that the Office of Transportation was working on four handbooks in areas such as agricultural exports and transportation of agricultural products. For the record please tell us the titles of these handbooks and the status of each.

Mr. FITZPATRICK. In response to the demand for technical information on the proper transportation, handling, and documentation of transporting perishable agricultural commodities, OT continued to distribute each of three handbooks and initiated work on a fourth, a comprehensive transportation handbook for agricultural exporters. I will provide the title and status of each handbook for the record.

[The information follows:]

"Export Handbook for U.S. Agricultural Products"—revised and reprinted twice, with over 9,000 copies distributed in the last seven years, we decided to incorporate work on the next revision into a new transportation guide for agricultural exporters. We transferred some of our existing stock to Government Printing Office (GPO) and National Technical Information Service (NTIS) inventories.

"Protecting Perishable Foods During Transport by Truck"—also recently revised and reprinted twice, with over 40,000 copies in circulation over the last 34 years, this reference also is available from GPO and NTIS.

"Tropical Products Transport Handbook"—reprinted three times and translated by the Agency for International Development with over 7,000 copies in English and 4,000 copies in Spanish distributed in the last two years. It also is available from GPO and NTIS.

"Transportation Guide for Agricultural Exporters"—work was initiated on two of the fourteen volumes of the guide—Transportation Rates and Services and Export Documentation, Collection, and Insurance. These volumes were given priority since many first-time and small agricultural exporters have experienced difficulties in these areas. A volume on Meat and Poultry Products also is planned for this year.

Mr. WHITTEN. In general, who would your clients be? In other words, who would be using these handbooks?

Mr. FITZPATRICK. Our clients for these handbooks include first-time exporters as well as established companies who use these references as training aids for their own personnel as well as their customers. These companies include growers, shippers, carriers, receivers, custom house brokers, freight forwarders, law firms, and trade associations. Universities, consultants, research, and Federal and State government agencies also have obtained copies for short courses on post-harvest handling and export marketing projects.

COOPERATIVE RESEARCH

Mr. WHITTEN. We know that a lot of the work that OT does is cooperative technological research with State universities and industry associations. Please provide a list of those universities and the work you are doing with them and any Federal funds involved. Also provide the same information for industry associations.

Mr. FITZPATRICK. Our Agency cooperates with a number of State universities and industry associations on technological research. I will provide a list of current and recent cooperative efforts for the record.

[The information follows:]

The University of Georgia—Conducted a cooperative study to determine optimum locations for farmers' markets.

The Animal Transport Association—Developed load density guidelines for transporting livestock in the lower cargo compartments of aircraft, and reviewed and responded to EC-92 directives on livestock.

The Refrigerated Transportation Foundation—Research to determine critical vibration frequencies causing intransit damage to strawberries and grapes.

The American Beekeeping Federation—Improved methods for shipment of live honeybees to Saudi Arabia.

North Carolina State University—Improved methods for shipment of blueberries to Europe.

No federal funds have been expended in these cooperative efforts except for salaries and travel of OT employees.

TRANSPORTATION MODES

Mr. **Whitten**. Please provide a table showing the various modes of transportation used to move agricultural products and the volumes moved by each during the past five years.

Mr. **Fitzpatrick**. With the exceptions of grains and fresh fruits and vegetables, only limited data exist on the modal shares of agricultural commodities. This is the case because virtually all other agricultural products are moved by unregulated trucks. Grains and fresh fruits and vegetables comprise the most significant volume of agricultural products shipped. I will provide for the record tables showing modal share information for these commodities.

[The information follows:]

MODAL SHARES OF U.S. GRAINS

Year	Rail		Barge		Truck	
	1,000 tons	Percent	1,000 tons	Percent	1,000 tons	Percent
1988	157,589	45.2	64,169	18.4	126,639	36.3
1987	150,405	45.7	63,028	19.1	116,008	35.2
1986	125,249	44.9	52,600	18.9	100,825	36.2
1985	116,443	41.7	58,580	21.0	104,084	37.3
1984	139,029	47.4	67,786	23.1	86,338	29.5

MODAL SHARES OF U.S. FRESH FRUITS AND VEGETABLES

Year	Rail		Trailer on flat car		Truck	
	1,000 tons	Percent	1,000 tons	Percent	1,000 tons	Percent
1988	1,584	5.6	1,398	4.9	25,467	89.5
1987	1,705	6.2	1,538	5.6	24,183	88.2
1986	1,460	5.4	1,642	6.1	23,676	88.4
1985	1,483	5.9	1,563	6.2	22,177	87.9
1984	1,874	7.4	1,492	5.9	21,804	86.6

Source: USDA.

Mr. **Whitten**. Do you detect any trends and changes in modes of transportation?

Mr. **Fitzpatrick**. With respect to trends in modal shares of grains, the most significant shift in recent years has been an increase in the truck share of grain movement. This shift has been the direct result of an increase in domestic movements of U.S. corn, primarily driven by decreases in on-farm use of corn. As livestock feeding has shifted away from the farms where corn is grown, the need for truck transportation to move corn into use for domestic livestock feed and milling has increased. In recent years, shifts in modal share away from rail and barge have occurred even as the total volumes moved by all modes have tended to increase. The overall increases in grain movement that have occurred in recent years have tended to favor movements that rely less on barge and rail and more on truck. On the other hand, fresh fruits and vegetables modal shares have tended to remain relatively consistent over the past five years. Trucks continue to dominate the movement of these commodities, transporting nearly 90 percent of the total volume.

RAIL CAPACITY

Mr. WHITTEN. What would the economic losses be to the United States if additional railcars are not available?

Mr. FITZPATRICK. Rail capacity is a critical component in this Nation's grain marketing system. Analysis done by my office indicates that during the 1984-87 period railroads transported 51 percent of all U.S. grain moved domestically and 42 percent of all U.S. grain positioned for export. If adequate numbers of grain cars are no longer available to U.S. grain shippers, serious problems will be experienced throughout the marketing channel, from the farm gate all the way to the end user. To date, a comprehensive analysis of the economic impact of grain car shortages has not been made. As a followup to last year's analysis of future grain car need and availability, this office is currently initiating a study that will attempt to measure the costs of grain car shortages to U.S. agriculture and the costs of excess capacity in the Nation's grain car fleet. This analysis will provide public and private policymakers with important information about the relative costs of grain car shortages and the optimal level of grain car fleet capacity that must be maintained for the Nation.

RURAL AIR SERVICE

Mr. WHITTEN. Recently, the Office of Transportation conducted a study entitled, "Rural Air Service—Its Importance to Rural Communities—Its Status Since Deregulation." For the record please list the major findings from the report.

[The information follows:]

RURAL AIR SERVICE—ITS IMPORTANCE TO RURAL COMMUNITIES

Available studies of the impact of air service do not address the dynamic question of how air service can enhance local development potential. Rather, they examine an existing or planned airport and analyze its effect on the local economy at one point in time.

RURAL AIR SERVICE—ITS STATUS SINCE DEREGULATION

Flight frequency has increased in general, although there are differences, according to airport size, with smaller airports experiencing smaller increases.

The replacement of full-size jet aircraft with smaller equipment and the replacement of major carriers by commuter airlines.

For most small communities, the shift to commuter airlines appears to offer greater flight frequency and more convenient schedules.

Early concerns about the safety of commuter airlines which serve rural areas have abated as their safety record continues to improve since deregulation.

The real cost of airline fares dropped after deregulation, but decreased less in smaller communities than at large hub airports.

Traffic from airports located in smaller communities has declined for a variety of reasons, including the shift from full-sized jets to commuter aircraft, the accessibility to larger airports, and the decline in the reliability of air service from small communities.

The result is a declining spiral of fewer passengers from small communities using local airports, which in turn, leads to loss of service, service replacement by a new commuter unable to generate traffic because of prior unreliability, and a further drop in passengers—which leads yet again to loss of service.

Although there are exceptions, particularly among isolated rural communities without easy access to a hub airport, rural areas today are generally more closely tied into the national air system than before deregulation.

Mr. WHITTEN. We see that one of the findings indicates that the essential air service program has ensured rural communities continued access to the national air system. Describe for us the impacts to rural communities without the essential air service program.

Mr. FITZPATRICK. Loss of the essential air service—EAS—subsidy would have a range of impacts on the rural communities currently receiving EAS service. In some rural areas, communities located within 100 miles of a major airport may not be seriously affected, since many passengers from these communities already utilize larger nearby airports for cheaper fares and more convenient flights. Further, if EAS subsidy levels for a particular community are low, the subsidized airline may continue service without the subsidy if the service can be profitably maintained. However, rural communities concerned with economic development, especially expansion of the rural service sector, point to air access as a necessary condition for growth of rural business activity.

For those rural areas located fairly close to metropolitan centers which enjoy adequate alternative transportation linkages, loss of EAS may not seriously jeopardize community viability. However, sparsely populated, isolated rural communities may suffer more serious social and economic dislocations should they lose air service. Two types of rural communities can be described. First, isolated communities in sparsely populated rural areas need air service to conduct medical, business, and personal activities. The large distances separating these communities render alternate transportation, such as driving, impractical for meeting basic needs. Second, rural regions served by a cluster of EAS airports may be isolated from the national air system and the national economy if EAS support is eliminated. The region may be located a considerable distance from a metropolitan center with a major airport, and have insufficient population to sustain profitable air service. These regions may be linked by an adequate highway network, but the distances involved may make both personal travel and goods transportation costly and inefficient. Air access is necessary to link the region and integrate it into the national air system and the national economy.

In summary, loss of EAS would require a community-by-community analysis to determine alternate transportation access and the economic, medical, and recreational impact of the loss of air service.

RURAL ROADS AND BRIDGES

Mr. **Whitten.** The Office of Transportation recently released the findings of a two-year study concerning the financing of rural roads and bridges by Federal, state, and local governments nationwide. What was the cost to complete this study? Break out the costs between the elements that helped pay for it.

Mr. **Fitzpatrick.** The two-year study was actually a multi-year undertaking that produced three reports dealing with the comparative assessment of rural road and bridge financing. A fourth report is currently in the final draft stage and will be released later this year. Total costs for the entire study amounted to $128,500.

Over the period from July 16, 1984 to December 31, 1988, OT authorized the expenditure of $93,700 to Western Illinois University for the completion of the comparitive assessment of rural road and bridge financing reports. In addition, OT paid the printing costs for these reports which were approximately $4,800. Printing costs for the final report are not available at present. Non-Federal funding included approximately $30,000 from Western Illinois University that was necessary for the completion of the project.

Mr. **Whitten.** Your study on rural bridges found that about 215,000 rural highway bridges, or 46 percent of the total, were classified as having structural or functional problems. Does the study go into any details of the cost of fixing the bridges to the point of passing minimal standards and who ought to pay for repair and replacement?

Mr. **Fitzpatrick.** The study, "Rural Bridges: Assessment Based Upon the National Bridge Inventory," does not provide details concerning the costs of repairing structurally deficient or functionally obsolete rural bridges. The Federal Highway Administration, U.S. Department of Transportation is required to report to Congress annual bridge improvement costs. In their latest bridge report they estimated that $92.9 billion would be required to eliminate current bridge deficiencies and those deficiencies expected to occur in the next 15 years. The $92.9 billion breaks down to $43.5 billion for rural bridges and $49.4 billion for urban bridges and represents 1987 dollars from all funding sources. The estimated cost of bringing all deficient bridges, eligible for Federal-aid under the bridge program guidelines, up to current standards is $51 billion; a rural and urban break-down is not available.

The OT Rural Bridge Study does provide a state-by-state comparison of the level of government responsible for repair of deficient or obsolete rural bridges. County governments are responsible for 63 percent of the Nation's deficient or obsolete rural birdges, and States have this responsibility for 30 percent of them. City or local governments are responsible for 6 percent; the Federal Government, for less than 1 percent. Federal bridge funds are apportioned to the individual States, and are utilized for State bridge projects or distributed to county or local governments.

COOPERATIVE RESEARCH

Mr. **Whitten.** In your explanatory notes you indicate that the University of Georgia developed a computer model for determining the optimum locations for farmers' markets, and that the Office of

Transportation provided support research for the development of this model. When you do such projects in conjunction with universities, do you sign a memorandum of agreement and provide funds or just how does the cooperative effort work?

Mr. FITZPATRICK. Generally, in our cooperative research efforts, we sign a memorandum of understanding or cooperative agreement. A cooperative agreement is used when one side or the other is furnishing funds or something of monetary value. In this particular case with the University of Georgia, a cooperative agreement was used. OT provided researchers and use of it's Transportation Laboratory at the Beltsville Agriculture Research Center. The University of Georgia furnished researchers also and purchased fruit and vegetables for the experiment.

REGULATORY ACTIVITY

Mr. WHITTEN. The Office of Transportation participated in several regulatory proceedings before the Interstate Commerce Commission on behalf of agriculture interests during 1989. For the record please describe each of these regulatory proceedings in which the Office of Transportation participated.

Mr. FITZPATRICK. My agency monitors regulatory proceedings before the Interstate Commerce Commission—ICC—on a daily basis for issues affecting the interests of agriculture and rural America. The two most important such regulatory proceedings in which my agency participated in 1989 were the *National Grain and Feed Association v. Burlington Northern Railroad* (BN-COT) case, and *Shippers Committee, OT-5, v. The Ann Arbor Railroad Company, et al.* (SCOT-5) case.

In the BN-COT case, the question before the ICC is the legality of the Burlington Northern "Certificate of Transportation" program under which future rail transportation capacity for grain movements is offered for sale to any shipper seeking guaranteed rail service. The National Grain and Feed Association challenged the lawfulness of this program in a complaint filed with the ICC in March, 1988. In November of 1988, the ICC authorized my agency to participate in the case without conditions. We asked to participate because of a concern for the availability of reliable and timely rail transportation at reasonable cost to all shippers of agricultural products. Most recently, we petitioned the ICC asking that a recent petition of the BN to dismiss the case not be granted. We anticipate that the complaint will not be dismissed and expect to file arguments against the program as soon as the ICC rules on the petition to dismiss.

The SCOT-5 case is a long-running controversy between covered hopper car owners and the railroads concerning the conditions under which privately owned cars are to be allowed access to the Nation's rail system. My agency has participated several times in this case, urging the ICC each time to allow "free, open and unrestricted" access for these private cars. We maintain that now, more than ever, there is a need for privately owned cars to be allowed to enter the nation's rail system to augment the railroad fleet which is steadily decreasing in size because of age. On September 15, 1989, the ICC ruled that private cars could not be denied access to the rail lines, but that the railroads can give loading preference to rail-owned cars. The SCOT-5 petitioners recently asked the ICC to reopen the case or clarify their September decision. We plan to file in support of the petition to reopen.

INTERNATIONAL TRANSPORTATION

Mr. **Whitten**. The Office of Transportation worked with the Department of State concerning an Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for Such Carriage. We understand that you were very concerned about the agreement and cautioned those working on a treaty concerning expansion. What specifically did you consider to be the problems with the treaty and the impacts on the American farmer?

Mr. **Fitzpatrick**. Problems with the treaty entitled Agreement on the International Carriage of Perishable Foodstuffs—ATP—arise from continued efforts by representatives of EC countries to add additional rules and regulations to the transportation of perishable foodstuffs in Europe. Also, many EC countries object to the fact that the United States can veto amendments to the ATP while at the same time U.S. perishable agricultural exports and associated transport operations are exempt under existing provisions.

The United States recently objected to proposals which would remove the exemption for U.S. trade with Mexico and Canada; remove the exemption for containers which travel by sea; add mandatory transport requirements for fresh fruits and vegetables; require expansive temperature recording devices in transport equipment; and begin regulation of air cargo operations.

These changes would adversely impact American farmers by increasing transportation costs to European as well as North American markets and thereby reduce the competitiveness of over $719 million in annual perishable exports to countries signatory to the treaty.

Unnecessary mandatory temperature requirements could lead to arbitrary rejection of U.S. fresh fruits and vegetables by inspection or customs personnel at ports of entry in Europe. The unnecessary addition of ATP requirements to international air cargo operations would make this type of transport uneconomical for high-value, highly-perishable exports.

Mr. **Whitten**. When do you expect to finish your investigation of ocean cargo liability insurance? Do you have any information that you can provide the Committee at this point on your findings?

Mr. **Fitzpatrick**. The Office of Transportation has completed the first phase of its activities in the area of cargo liability. At the request of the Department of Transportation, OT sent a letter dated January 31, 1989, advising the DOT that USDA supports the adoption of the Hamburg Rules. Briefly, the Hamburg Rules would more clearly define what a package is, and increase the possible settlement for each package damaged or lost; reconcile the different systems of liability between domestic rules, international rules, and between modes of transportation; and shift the responsibility for cargo loss or damage from the shipper to the entity at fault—which could be the shipper, the carrier, or the port.

The issues are being considered by the Department of Transportation. DOT has met with several Congressional subcommittees and industry associations. However, DOT has not yet made its recommendations to Congress. The Hamburg Rules, an international treaty, has been ratified by only 17 of the 20 nations necessary in order for it to come into force between signatory countries. The United States is not yet a signatory to the treaty.

Mr. WHITTEN. The most recent report of the Commission on Merchant Marine and Defense provided recommendations that would cost the Federal Government over $13 billion. Please provide these recommendations and what the Office of Transportation recommends for each.

Mr. FITZPATRICK. The "Fourth Report of the Commission on Merchant Marine and Defense" recommended that a number of actions be taken to bolster the domestic maritime industry. Enactment of the Commission's recommendations would cost the Federal Government about $13 billion. The major cost items recommended by the Commission include: a ship construction program—$10 billion; increased cargo preference obligations—$1 billion; and increase direct subsidies to ocean carriers—$2 billion. The Commission recommended that 100 percent of P.L.-480 shipments be subject to cargo preference.

OT responded to the Commission's report by objecting to the expansion of cargo preference because it would significantly increase the cost of operating the P.L.-480 program. Expansion of cargo preference would not enhance the ability of the domestic maritime industry to be cost-competitive with foreign-flag fleets.

TECHNICAL ASSISTANCE

Mr. WHITTEN. You recently provided technical assistance to the Government of Saudi Arabia on food transportation because of changes in shelf-life expiration dates. In such a case with a foreign government and assistance provided by OT, how is the technical assistance funded?

Mr. FITZPATRICK. In this case, the Foreign Agricultural Service—FAS—provided the funds for OT personnel to travel to Saudi Arabia and provide technical assistance on food distribution. OT gave a series of seminars on food transportation to Saudi government and industry personnel. The seminars were part of a promotional effort by the FAS aimed at increasing imports of U.S. food products into that country.

TIP SHEETS

Mr. WHITTEN. For the record please provide the tip sheets prepared by OT on "Protecting Animals During Shipment" and "Sanitation of Trucks Hauling Foods."

[CLERK'S NOTE.—Fourteen tip sheets were provided for the record and too lengthy to reprint. Copies will be retained in committee files. The titles of each follows:]

(1) Exporting Livestock: Where to get Information.
(2) Exporting Livestock: Transportation Options.
(3) Exporting Livestock: Preparing Cattle for Export.
(4) Exporting Livestock: Minimum Space Guidelines.
(5) Exporting Livestock: Drugs and Equipment for Cattle Shipped by Sea.

(6) Exporting Livestock: Penning Systems for Livestock Shipped by Air.
(7) Exporting Livestock: Presenting Cattle for Export Markets.
(8) User's Guide to the RTF Truck Trailer Classification.
(9) Protecting Animals During Shipment in Aircraft Baggage/Cargo Holds.
(10) Refrigerated Trailers and Containers: Preload Checklist.
(11) Refrigerated Trailers and Containers: Loading Procedures.
(12) Regulations Governing Sanitation in Vehicles Transporting Food.
(13) Regulations Governing Construction Materials and Cleaning Compounds Used in Food Transport Vehicles.
(14) Regulations Governing Joint Use of Vehicles Transporting Food and Hazardous Materials.

Mr. WHITTEN. How many of these sheets are printed, what is the total cost for preparation and distribution of these tip sheets?

Mr. FITZPATRICK. We printed and distributed approximately 1,000 copies of each of these 14 tip sheets. Printing and distribution costs are estimated at $5,000. Professional and support services required to prepare the tip sheets is estimated at $100,000.

Mr. WHITTEN. Mr. Skeen.

LOYALTY CONTRACTS

Mr. SKEEN. Thank you, Mr. Chairman.

Welcome Mr. Fitzpatrick. You have a very modest increase in your budget for personnel increases, et cetera.

You mentioned your regulations over international shipping or ocean liners. What is a loyalty contract?

Mr. FITZPATRICK. A contract with a shipper and a carrier.

Mr. SKEEN. Is this exclusively maritime?

Mr. FITZPATRICK. Yes, in this case it has a specific maritime context. If a shipper agrees to ship a percentage of his total commodities through one carrier, then he gets a rate for that commitment and loyalty.

Mr. SKEEN. Do they bid those rates?

Mr. FITZPATRICK. Those are private negotiations. It is usually not known.

Mr. SKEEN. So if you have a buddy who has been hauling your cargo for some time and you renegotiate a contract, it is called a loyalty contract.

Mr. FITZPATRICK. Yes. Those are beneficial to U.S. agricultural producers and shippers.

Mr. SKEEN. Generally they are because that is where we get aced out of the markets. This controversy comes out of Congress all the time about shipping on American boats.

Evidently American shippers don't compete well with some of the foreign shippers. Are most of the loyalty contracts with foreign flag shippers?

Mr. FITZPATRICK. They are with both, but in fact there are not many anymore.

Mr. SKEEN. That is unfortunate, too.

Mr. FITZPATRICK. There is shipping cartel that was created by the United States in the 1984 Shipping Act. We are hoping that they will accommodate some of the agricultural interests this next time around.

BACKHAULING

Mr. **Skeen**. On the backhauling issue, I sensed from your testimony that the best resolution to the problem is a voluntary one at this point.

Mr. **Fitzpatrick**. Yes, sir, it is.

Mr. **Skeen**. I would think if you got involved in that it would be almost a case-by-case situation because backhauls, almost in each instance, depends on the economy and where you are going. That would be a maze and a nightmare to get into as far as regulations.

Is there any regulatory agency that says what you can haul after you have hauled certain food items.

Mr. **Fitzpatrick**. There is no specific regulatory authority.

Mr. **Skeen**. You mean EPA has not muscled into that area?

Mr. **Fitzpatrick**. They have knowledge but no authority.

Mr. **Skeen**. That is their problem. They have some knowledge but no specific authority.

Mr. **Fitzpatrick**. I will not comment.

Mr. **Skeen**. That is my comment. I was very curious about the issue.

If you have few food products, for instance, meat haulers, and refrigerated trucks, I could not imagine them hauling trash or hazardous material. But if they can get a backhaul they certainly want it.

LIABILITY INSURANCE

In these days if you do not have two-way traffic you are just about out of business. That is an observation. I think we both understand what the problem is. How about liability insurance?

Haulers in our part of the country are constantly in a State of tremendous agitation and concern because liability is eating them alive and they are going out of business because of it.

Mr. **Fitzpatrick**. We have worked with the Interstate Commerce Commission that regulates some liability insurance provisions. Last year they had a proceeding to kind of restrict and keep a ceiling on the liability.

Mr. **Skeen**. To cap them?

Mr. **Fitzpatrick**. Yes, to cap them. They have made an arrangement with the truckers and the shippers.

I do not have the details of that but I would be happy to supply it for the record.

[The information follows:]

PUBLIC AND CARGO LIABILITY REQUIREMENTS FOR MOTOR CARRIERS

The Interstate Commerce Commission (ICC) has adopted for motor carriers under its jurisdiction the same minimum public liability requirements that the Federal Highway Administration has prescribed for motor carriers generally. They are as follows: $300,000 for vehicles under 10,000 pounds gross vehicle weight; $750,000 for vehicles over 10,000 pounds gross vehicle weight carrying non-hazardous property; $1,000,000 for vehicles over 10,000 pounds carrying hazardous property other than such items as class A and B explosives; $5,000,000 for vehicles carrying extremely hazardous cargoes such as class A and B explosives.

The ICC has responsibility for establishing minimums for cargo liability insurance for motor carriers under its jurisdiction. The current levels are $5,000 for any single shipment and $10,000 for the entire truckload. The ICC has requested comments in a rulemaking that would remove the minimum cargo insurance requirements. A decision is pending in this proceeding.

A limit or cap on public or personal liability for regulated motor carriers has not been established by the Commission. The minimum liability requirements are set forth at 49 CFR 1043.

Mr. SKEEN. If you did cap them, it is a trend that should have occurred some time ago to muscle the liability situation. We are driving most of the private sector business completely off the board with the liability situation.

I would be very interested in how that is being handled because it is a tremendous problem in our operations in the Western part of the United States.

CLOSING REMARKS

Mr. WHITTEN. Thank you very much for your responses and your testimony.

We appreciate your being here. You have made a good case.

We have had to save your unit two or three times but we figure it has been well worth it.

Thank you all for being here.

OFFICE OF TRANSPORTATION

Statement of Martin F. Fitzpatrick, Jr., Administrator, Office of Transportation, before the House Subcommittee on Rural Development, Agriculture, and Related Agencies.

Mr. Chairman, Members of the Committee, I appreciate this opportunity to appear before you. With me today are Dr. Wesley R. Kriebel, my Deputy Administrator, and Lee H. Keely, Resource Manager for the Office of Transportation.

Proposed Funding Increase

I am particularly pleased to present the 1991 budget, Mr. Chairman. The Bush Administration supports the transportation needs of agriculture and rural citizens, and recognizes the importance of transportation to the agricultural economy, to expansion of agricultural exports, and to the vitality of rural America.

We propose to increase funding for the Office of Transportation (OT) from $2,397,000 to $2,429,000. This small increase will partially offset projected pay increases but will leave the program fundamentally unchanged.

Making a Difference

In the explanatory notes which accompany our budget submission we have tried to be thorough in describing OT accomplishments. In testimony today I can only hit the highlights briefly, but I would like to mention a few things the agency has done recently in which I can say with total confidence that OT has made a real difference.

International Trade and The Shipping Act of 1984

A major goal of U.S. foreign policy, and certainly of USDA policy, is to ensure that U.S. agricultural products can compete fairly in world markets. The Shipping Act of 1984 significantly changed the regulatory environment for ocean shipping. This law regulates the ocean liner industry, which carries over $14 billion worth of agricultural products annually, and therefore impacts international markets. The legislation contained provisions for a comprehensive review after five years.

Representing agricultural exporters, OT filed comments in two proceedings before the Federal Maritime Commission in support of loyalty contracts and simplified ratemaking. To ensure that agricultural exporters have access to important information concerning the impact of the Shipping Act, OT sponsored three workshops, which were well attended. The workshop proceedings were published in 1989 and widely distributed to exporters.

OT has worked with agricultural exporters in an effort to ensure they are represented in the work of the Advisory Commission on Conferences in Ocean Shipping, currently under formation. The commission will hold hearings in 1990 and make recommendations to Congress in 1991.

I am sure that OT's active involvement in the implementation and review of the Shipping Act, and related work such as monitoring development of EC directives affecting transportation of livestock and other agricultural products, is helping to improve the competitive position of U.S. exporters.

Availability of Railcars For Grain

In recent years, almost no new grain cars have been added to the nation's railcar fleet. Grain car availability problems in early 1988 led to concern and debate over the ability of the U.S. rail system to meet future grain transportation needs. In 1989, OT published a research report which quantified the likely supply and availability of railcars for grain in future years. The study is generally regarded as authoritative by industry and by regulatory and judicial agencies. It has been cited frequently in the media and has become a focus for further debate on the subject. This study was timely and relevant. It is clearly making a difference to the shipping public concerned with grain transportation and maintaining competitiveness in international markets. OT will continue this effort with an emphasis on finding market solutions which strike a balance between the interests of the railroad industry and the interests of the grain industry, and which let both sides share the risks and rewards of railcar investment.

The Backhauling Issue

In response to national publicity last spring concerning the hauling of municipal trash and hazardous materials in the same vehicles that haul food products, OT convened a series of three interagency coordinating meetings in June of 1989. Other agencies included USDA's Food Safety and Inspection Service, the Environmental Protection Agency, the U.S. Department of Transportation, the Interstate Commerce Commission, and the Food and Drug Administration.

The purpose of the meetings was to attempt to verify the reports, assess the extent of the practice, determine the extent of existing regulatory authority, and coordinate a response under existing regulations. Member agencies collected evidence documenting the extent of the problem. The consensus was that the best approach available under existing law was to promote a voluntary solution through notification and education of the shipping public.

The group compiled a list of statutory and regulatory authorities existing among the various agencies which could address the issue. Agencies with regulatory authority notified their respective constituents. Agency representatives presented the findings in Congressional testimony.

OT prepared three pamphlets, or "tip sheets," which provide shippers with a list of regulations and their enforcing government agencies, a list of publications and where they can be obtained, and contact points within the government for additional information. These OT publications were publicized through trade associations and directly distributed through the mail and electronic information services. Response to the educational campaign was very favorable. Food industry representatives certainly do not want and cannot afford bad publicity and have taken steps to eliminate such practices by refusing to do business with trucking firms that haul trash in food trucks. I believe OT made a difference in promoting a responsible, cost-effective government response to a controversial situation.

Trade with Mexico

In the late 1970's the volume of agricultural trade between the U.S. and Mexico increased significantly, and now amounts to more than $4 billion annually. Because of the logistical problems which resulted from this increased trade, particularly shipments of U.S. grain, CONASUPO, the Mexican government food purchasing agency, and the USDA agreed to establish a bilateral transportation group, which would meet each year to address these problems. The USDA relies upon OT to coordinate the efforts of this group.

In May 1989 OT organized a meeting in Mexico involving CONASUPO, USDA officials, and over 350 representatives of grain merchandisers, grain importers and purchasers, and rail carriers interested in improving the logistics of U.S.-Mexico agricultural trade. A similar conference will be held in 1990 in New Orleans.

The USDA border coordinator is also involved on a daily basis with border transportation problems relating to inspection, customs, or border interchange which may develop on U.S. agricultural exports to Mexico.

The necessity to establish institutional arrangements to facilitate the logistics of trade with Mexico has been self-evident from the moment trains first started backing up at the border, unable to cross because of one constraint or another, and U.S. railroads understandably started refusing to send railcars into Mexico because of intolerably long turnaround times. Since OT has been coordinating USDA's efforts, many improvements have been made to streamline inspection procedures, railcar turnaround time in Mexico has been dramatically reduced, and communications among all parties has been improved so that problems are dealt with swiftly and efficiently before they get out of hand.

Rural Development and National Transportation Policy

For several years OT has been involved in various activities concerning rural mobility and the needs of rural America for roads, bridges, and adequate access to mainstream transportation networks. In 1989 OT released two reports, one on rural mobility, the other on financing rural roads and bridges, each the result of multiyear projects involving original research done in cooperation with counties, and other State and local governments. The purpose of this long-term program is to identify uniquely rural issues and focus attention on them.

To contribute to discussions regarding the Nation's future transportation needs and policy, OT reviewed testimony given at 65 public forums held during 1987-88 as part of a broad-based national effort called Transportation 2020, which was begun by the American Association of State Highway and Transportation Officials. The purpose was to identify and analyze the rural issues emerging from that testimony. OT's findings have been widely disseminated by agencies and organizations concerned with rural transportation. This report and much of OT's other work were used by the U.S. Department of Transportation (DOT) in preparation for a series of rural hearings held during 1989 as part of its National Transportation Policy development process.

OT contributed to several DOT working groups on different aspects of transportation policy, including international transportation, and participated with DOT on each of eight hearing panels on rural transportation held throughout the country. OT's participation was highly regarded by DOT officials, and there is no question that OT's contributions enriched the policy development process.

Transportation Technology

Innovations in transportation technology are vital to ensure that products from U.S. farms reach their markets here and overseas in top condition. OT conducts research on transportation problems and is a source of information on proper transportation and handling techniques. During 1989 OT worked on a study which determined the optimum location for farmers markets. In another study, OT worked to reduce shipping damage in grapes and strawberries, which costs the industry $18 million each year. In addition to the research, OT distributed more than 10,000 publications in 1989 on subjects ranging from proper packaging of tropical fruits to humane treatment of livestock during shipment. These requests for information from constituents across the country are evidence that OT is having a favorable impact on the transportation of agricultural products.

Future Priorities

In his State-of-the-Union address President Bush spoke of the incredible changes taking place in Eastern Europe and around the world--changes unforeseen just a year ago. Secretary Yeutter recently headed a delegation to Poland to see how the U.S. can provide assistance to that country and open opportunities for expanded trade. In some instances opportunities abroad will meet with capacity constraints in foreign ports or other transportation problems. We are involved now in task force activities at USDA concerning strategies for Eastern Europe, and OT will have an expanded or refocused role in its international work.

We will continue our efforts to improve the supply of railcars for the movement of grain. Admittedly this is a long-standing problem for agriculture and the railroads, but circumstances keep changing, and we are committed to finding significant, long-term solutions.

We will continue our work in rural development in keeping with Secretary Yeutter's rural development initiative with an emphasis on cooperative solutions with State and local governments to promote an adequate rural road and bridge network to meet the needs of agricultural production and mobility of rural residents. We will work with the Department of Transportation to implement the National Transportation Policy concerning rural transportation and in other respects affecting agriculture and agricultural exports.

We will continue our research and technical assistance concerning transport technology to ensure that U.S. industry is using the best techniques available to move agricultural products. This will increase the quality of products for U.S. consumers and make our exports more competitive abroad.

We will also continue the Mexico border coordination work, policy analysis as required, and technical assistance to the shipping public. These various activities exemplify the three areas we use for goal setting in OT: Moving American Agricuture, Expanding Exports, and Peconnecting Rural America

Conclusion

In conclusion, Mr. Chairman, I am proud of the OT record of accomplishment. OT will continue its commitment to doing work that is vital to agriculture and rural America and responsive to the needs of the Administration, the Congress, and the public whom we serve. We will be happy to respond to any questions.

OFFICE OF TRANSPORTATION

Purpose Statement

The Office of Transportation (OT) was established by Secretary's Memorandum 1966 on December 12, 1978. The Office was formed by consolidating several Departmental transportation functions to solve problems of U.S. and world agricultural transportation systems. Programs are carried out under the following legislation:

1. Agricultural Adjustment Act of 1938 (7 USC 1281 et seq.)
2. Agricultural Marketing Act of 1946 (7 USC 1621 et seq.)
3. Agricultural Trade and Assistance Act of 1954 (7 USC 1427, 1431, 1691, et seq.)
4. Rural Development Act of 1972. (7 USC 2662, 2663)
5. International Carriage of Perishable Foodstuff Act of 1982.
6. Cooperative Marketing Act of 1926 (7 USC 291, 292)

OT is delegated the authority given the Secretary of Agriculture to represent the interests of Agriculture and rural communities in the U.S. to assure the availability of an adequate and economical transportation system, domestically and internationally. The Office of Transportation is specifically organized to coordinate broad phases of the Department's transportation policies and programs.

The mission of OT is to develop and promote an efficient agricultural transportation system to help improve farm income, expand exports and meet the needs of rural America. The Agency provides technical and administrative direction, coordination, and leadership in the development and execution of agricultural transportation policies and programs of USDA. OT provides a basis for Federal-State decision-makers in regulatory, policy and legislative matters in order to assure the transportation needs of rural communities and agriculture.

The current organization has two divisions--domestic and international--that reflect our Nation's growing interest and emphasis on international trade, while providing continuous identification and timely analysis of domestic transportation impediments. Major program responsibilities are:

1. Domestic Transportation Services

OT determines the impact upon agriculture of proposed changes in transportation legislation, rates, or services and provides for the representation of agricultural interests in such matters before State and Federal agencies. Specifically, OT provides assistance to farmers and agricultural shippers by developing proposals, negotiating with carriers and participating in regulatory proceedings before the Interstate Commerce Commission to resolve high priority transportation issues.

2. Rural Transportation Economics and Development

OT addresses the overall transportation infrastructure needs of rural America in order to access national and world markets. The agricultural community is assisted through economic assessments of deteriorating rural roads and bridges, rail trackage abandonments, deterioration of rural inter-city bus service, and other inland transportation constraints. The Office provides educational programs on domestic and international transportation events and fosters improved Federal, State and local partnerships for solving transportation access problems affecting rural communities.

3. International Policy and Trade Analyses

OT assists agricultural exporters in developing foreign market opportunities through short term economic analyses of port logistics and transport system impediments. Recommendations are directed toward more cost-effective methods to move U.S. products to world markets. Technical assistance is also provided to agricultural exporters on freight rates, plus ocean and intermodal services to meet the transport access needs of American agriculture.

4. Export Services

OT conducts technological research and demonstration programs, often in cooperation with private industry, to improve the international and domestic transportation systems for agricultural and food products. The Office administers the Agreement on the International Carriage of Perishable Foodstuffs which requires the establishments of a program of inspection, testing and certification of refrigerated equipment to meet health and safety requirements of some Nations for the transport of certain foodstuffs within Europe.

The functions of OT are carried out by a technical and administrative staff located in Washington, D.C. As of September 30, 1989, there were 35 full-time employees and two part-time employees.

OFFICE OF TRANSPORTATION

Available Funds and Staff-Years

1989 Actual and Estimated, 1990 and 1991

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Office of Transportation	$2,397,000	35	$2,397,000	35	$2,429,000	35
Obligations under other USDA appropriations:						
Foreign Agricultural Service for services on the Mexican sales agreement ...	12,000	--	30,000	--	30,000	--
Total, Office of Transportation	2,409,000	35	2,427,000	35	2,459,000	35

Full-Time Equivalent Staff-Years:	1989 Actual	1990 Estimated	1991 Estimated
Ceiling	35	35	35
Non-ceiling	--	--	--
Total	35	35	35

OFFICE OF TRANSPORTATION

Permanent Positions by Grade and Staff-Year Summary

1989 and Estimated 1990 and 1991

Grade	1989 Headquarters/Total	1990 Headquarters/Total	1991 Headquarters/Total
ES-2	1	1	1
GS/GM-15	4	4	4
GS/GM-14	7	6	6
GS/GM-13	9	8	7
GS-12	5	5	5
GS-11	2	3	3
GS-9	1	2	3
GS-7	4	4	4
GS-6	1	1	1
GS-5	1	1	1
Total Permanent Positions	35	35	35
Staff-Years:			
Ceiling	35	35	35
Non-Ceiling	--	--	--
TOTAL	35	35	35

OFFICE OF TRANSPORTATION

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

		1989	1990	1991
Personnel Compensation:				
11	Total Personnel Compensation	$1,557,134	$1,599,000	$1,649,000
12	Personnel Benefits ...	244,207	251,000	258,000
13	Benefits for Former Personnel	---	---	---
Total Personnel Compensation and Benefits		1,801,341	1,850,000	1,907,000
Other Objects:				
21	Travel	56,300	65,000	50,000
22	Transportation of Things	1,759	2,000	2,000
23.3	Communications, Utilities, and Misc. Charges	92,102	95,000	95,000
24	Printing and Reproduction	36,071	35,000	30,000
25	Other Services	273,247	260,000	260,000
26	Supplies and Materials	31,220	35,000	30,000
31	Equipment	87,927	55,000	55,000
Total Other Objects		578,626	547,000	522,000
Total Direct Obligations		2,379,967	2,397,000	2,429,000

Position Data:

	1989	1990	1991
Average Salary, ES Positions	$78,582	$87,226	$95,870
Average Salary, GM/GS Positions	$42,244	$43,760	$44,490
Average Grade, GM/GS Positions	11.57	11.37	11.26

OFFICE OF TRANSPORTATION

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Office of Transportation

> For necessary expenses to carry on services related to agricultural transportation programs as authorized by law; including field employment pursuant to section 706(a) of the Organic Act of 1944 (7 U.S.C. 2225), and not to exceed $20,000 for employment under 5 U.S.C. 3109, [$2,397,000: Provided, That this appropriation shall be available pursuant to law (7 U.S.C 2250) for the alteration and repair of buildings and improvements, but, unless otherwise provided, the cost of altering any one building during the fiscal year shall not exceed 10 per centum of the current replacement value of the building] $2,429,000.

The change in language is for the purpose of deleting authority to alter and repair agency-owned buildings. The agency is now located in space rented from GSA and the Agricultural Research Service. Any necessary building alterations and repair can be obtained under the authorities for these two agencies.

OFFICE OF TRANSPORTATION

Appropriation Act, 1990	$2,397,000
Budget Estimate, 1991	2,429,000
Increase in Appropriation	+32,000

SUMMARY OF INCREASES
(On basis of appropriation)

Item of Change	1990 Estimated	Pay Cost	Program Changes	1991 Estimated
Office of Transportation	$2,397,000	+$32,000	--	$2,429,000

PROJECT STATEMENT
(On basis of appropriation)

	1989 Actual		1990 Estimated			1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Increase/Decrease	Amount	Staff-Years
Office of Transportation							
1. Research	$1,071,015	16	$1,079,000	16	--	$1,079,000	16
2. Technical Assistance	1,308,952	19	1,318,000	19	+$32,000	1,350,000	19
Unobligated Balance	17,033	--	--	--	--	--	--
Total Appropriation....	$2,397,000	35	$2,397,000	35	(1) +$32,000	$2,429,000	35

EXPLANATION OF PROGRAM

The programs of the Office of Transportation (OT) are carried out under the authority of the (1) Agricultural Marketing Act of 1946, (2) Agricultural Adjustment Act of 1938, (3) Agricultural Trade and Assistance Act of 1954, (4) Rural Development Act of 1972, and (5) International Carriage of Perishable Foodstuffs Act of 1982.

These activities are designed to assure that the transportation system will adequately serve the agricultural and rural areas of the United States and will provide the services necessary to assure the residents of these areas adequate facilities for the movement of agricultural commodities and people. The main areas of responsibility are providing technical assistance to shippers and carriers, technological research, development, and demonstrations in agricultural transport equipment, and participation in transportation regulatory actions before various Federal agencies. The Department is involved in the implementation of the International Carriage of Perishable Foodstuffs Act of 1982. In addition, OT provides economic analyses to enable the Department of Agriculture to develop policy recommendations for addressing current or anticipated problems in domestic and international agricultural transportation.

JUSTIFICATION OF INCREASES AND DECREASES

(1) An increase of $32,000 for pay costs ($2,397,000 available in 1990).

An increase of $32,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS

1989 and Estimated 1990 and 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
District of Columbia	$2,379,967	35	$2,397,000	35	$2,429,000	35

OFFICE OF TRANSPORTATION

STATUS OF PROGRAM

Current Activities: The mission of the Office of Transportation (OT) is to promote and assist in the development of an efficient agricultural transportation system to help improve farm income, expand exports, and meet the transportation needs of rural America. The Agency provides technical and administrative direction, coordination, and leadership in the development and execution of agricultural transportation policies and programs of USDA. OT provides assistance to State and local decision-makers and to farmers and shippers in regulatory, policy and legislative matters in order to satisfy the transportation needs of rural communities and agriculture. To carry out this mission OT is organized into two divisions, Domestic and International, with each division consisting of two branches.

Major OT functions are to:

A. Conduct Economic Studies and Analyses of domestic and international transportation systems as they pertain to agricultural and food products and farm supplies in order to develop policy recommendations and address anticipated problems in agricultural and rural transportation.

B. Represent Agricultural and Rural Transportation Interests in policy and regulatory forums to assure that U.S. agriculture continues to have access to domestic and international markets for its products and that transportation resources are used effectively.

C. Provide Technical Assistance on agricultural transportation, rural access, and food distribution matters to producers, producer groups, shippers, rural communities, carriers, government agencies, and universities.

D. Provide Informaton to users and suppliers of transportation services, government agencies, and the public through timely reports and periodic publications.

E. Conduct Technological Research and demonstration projects with the goal of improving the domestic and international transportation systems for agricultural products.

Selected Examples of Recent Progress:

A. ECONOMIC STUDIES AND ANALYSES

Supply and Availability of Railcars For Grain

In recent years, almost no new grain cars have been added to the Nation's railcar fleet. Grain car availability problems in early 1988 led to concern and debate over the ability of the U.S. rail system to meet future grain transportation needs. In 1989, OT published a study which quantified the likely supply and availability of railcars for grain in future years. This study, Railcars for Grain: Future Need and Availability, has been well regarded among government and industry parties, has been cited frequently in the media, and is generally regarded as an authoritative document for policy considerations by industry, and by regulatory and judicial agencies.

Rural Passenger Transportation

OT is addressing the rural mobility issue by helping to find solutions to the loss of intercity bus and air service. During this year, OT released the results of a multi-year effort completed with the help of the U.S. Department of Transportation's Urban Mass Transportation Administration, the United Bus Owners of America, and a national level planning committee involving a wide range of agencies and organizations concerned about rural mobility. Grassroots input obtained through three regional symposia held across the country during 1987 and 1988 are reported in *Reconnecting Rural America: Report on Rural Intercity Passenger Transportation*. This input provided the basis for a national strategy-development conference of rural transportation leaders in August 1988, the results of which are presented in *Reconnecting Rural America: Recommendations for a National Strategy*.

As a part of this overall effort, OT also has examined rural air service by studying the importance of air service to rural communities and reviewing the impact of deregulation to determine how well it ties into the other transportation modes serving rural communities. Air service linkages with rail, bus, taxi, and the private automobile help move people and goods more efficiently, and play an important role in maintaining rural mobility. The results of OT's study are provided in "Rural Air Service: Its Importance to Rural Communities, Its Status Since Deregulation". Major findings include the fact that: 1) rural areas, with a few exceptions, are more closely tied into the national air system than before deregulation; 2) rural areas generally receive more frequent and convenient service through the current feeder-collection system that has emerged since deregulation; 3) the real cost of fares from small communities declined after deregulation, but proportionately less than fares from metropolitan areas as airlines could no longer cross-subsidize rural routes by charging higher fares for more densely traveled routes; 4) rural air service safety has improved since deregulation as commuter airlines now must meet stricter safety standards; 5) The Essential Air Service Program, designed to maintain air service to selected rural communities during the transition after deregulation, has ensured those communities continued access to the national air system, an assurance not available to them before deregulation, and 6) the availability of air service in a rural community can contribute to economic viability, but the impact varies according to the size of the local economy and its ties with the larger regional, State, and national economies.

OT released the findings of a two-year study on the financing of rural roads and bridges by Federal, State, and local governments nationwide to fill a void in information available about the Nation's highway system. State and local highway officials were surveyed to obtain a more complete understanding of rural road and bridge conditions, financing methods, and policy alternatives. The study, completed in cooperation with Western Illinois University and in coordination with the National Associations of Counties, County Engineers, and Towns and Townships, and the American Association of State Highway and Transportation Officials, makes readily available at the national level information about the size of the rural road system, the diversity of local and State government responsibility, the condition of roads and bridges, the issues being faced at the local and State levels, and options available at all levels of government for improving rural roads and bridges.

The detailed findings are reported in two volumes: Rural Roads and Bridges: Federal and State Financing, and Rural Roads and Bridges: A Dilemma for Local Officials. These include the following: 1) rural roads and bridges account for about 81 percent of the nation's total number of highway miles and bridges; 2) although the rural road network is almost entirely the responsibility of local and State government, the responsibility varies greatly depending upon the governmental structures and laws of the States; 3) over a third of the rural mileage maintained by counties, towns, and townships is not considered to be in good surface condition, whereas about half of the rural bridges that are 20 feet or greater in length barely meet minimum tolerable limits to be left in place; moreover, neither situation is improving; 4) the costs of maintaining rural roads and bridges are substantial; and 5) given current financial resources, it is questionable whether many rural governments are able to adequately maintain existing mileage and bridges.

Using the information, OT also assisted the National Association of Counties and the U.S. Department of Transportation's Federal Highway Administration in the development of a State-by-State reference guide on county highway finance which has been distributed nationwide. The guide is called Linking America: The County Highway System.

Report on Importance of Small Railroads

Over the past decade, the most significant development in rail transportation has been the emergence of small railroads as a viable means by which rail service can be maintained to the rural areas of the United States. OT published an overview of the importance of small railroads to agriculture and rural America in 1989, presenting information on their historical development, the current policy issues affecting them, and the unique interest of agricultural and rural communities in their continued development.

Rural Bridges

As part of OT's effort to address the Nation's rural highway bridge problem, OT completed a study of the rural situation based upon data maintained by the U.S. Department of Transportation. The study report, "Rural Bridges: An Assessment Based Upon the National Bridge Inventory," presents a comparison of rural and urban bridges, and highlights rural bridges located in agriculturally significant counties. The study, based on 1988 data, found that about 215,000 rural highway bridges, or 46 percent of the total, were classified as having structural or functional problems, whereas only 31 percent of all urban highway bridges had similar classifications.
OT also continued working with USDA's Forest Service and a number of other agencies and organizations on the implementation of a Technology Transfer Plan for Timber Bridges, including the development and dissemination of timber bridge information and the conduct of on-site demonstrations. This year, OT coordinated the development of a brochure titled "Modern Timber Bridges: A Viable Alternative for Rural America" which was published by the National Forest Products Association as part of the overall effort; then distributed it to rural officials throughout the country.

Rural Tourism

Given the importance of rural transportation infrastructure and services to the support of rural tourism as an economic development strategy, OT served on a Federal Task Force on Rural Tourism created by the U.S. Travel and Tourism Administration within the Department of Commerce under the auspices of the Tourism Policy Council. The Task Force completed a Congressionally mandated study on rural tourism. This study was completed through a series of regional meetings and a national conference. An independent report on Federal programs impacting rural tourism was submitted to the Tourism Policy

Council. It indicated that a national policy on rural tourism development should enhance transportation access to rural areas with tourism potential, and should encourage as a priority objective the systematic improvement of rural roads and infrastructure in areas with tourism resources and potential. The study concluded that a national policy should recognize that Federal agencies responsible for land management, transportation, and encouragement of the arts play a role in rural economic development even though they manage programs designed to meet other goals, and found that scenic byway programs can address economic development needs of rural communities, pointing to the need for a national policy on scenic byways development.

OT Analyzes Panama Canal Situation

OT determined that 33 million metric tons of U.S. grain passed through the Panama Canal in FY 1988. This figure amounted to 28 percent of all grain exported and 65 percent of all grain exported to the Far East. In addition to grain, U.S. cargoes of beans, canned food, cotton, flour, lumber, peas, refrigerated foods, sugar, tallow, tobacco, vegetable oil, and wool also transit the canal. If the canal were closed, carriers out of Gulf ports would have to travel longer distances through the Suez Canal or around Africa or South America to reach Far East markets. The cost to deliver U.S. grains to Asia would probably increase about $6.50 per metric ton.

OT Assists in Farmers Market Study

The University of Georgia recently developed a computer model for determining the optimum locations for farmers markets. OT provided support research for the development of this model by determining the quality losses of various fruits and vegetables from road vibration. It was determined that when farmers transport fresh produce more than 30 to 40 miles from the field to markets or packing facilities, measurable economic losses are likely. State Departments of Agriculture and Extension specialists will use this information to assist in planning for the rapidly expanding local farm market industry.

B. REPRESENTATION OF AGRICULTURAL AND RURAL INTERESTS

Regulatory Representation before Interstate Commerce Commission

OT participated in several regulatory proceedings before the Interstate Commerce Commission (ICC) on behalf of U.S. agriculture in 1989. OT monitors regulatory proceedings before the ICC on a daily basis for issues affecting the interests of agriculture and rural America.

Inland Waterways Users Board

The Water Resources Development Act of 1986 established a "Users Board" composed of eleven members appointed by the Secretary of the Army, selected to be representative of various regions of the country and various commodities shipped on the inland waterways. In addition, the law provided for official observers to be designated by the Secretaries of Agriculture, Transportation, and Commerce. The Board meets at least semi-annually to develop and make recommendations regarding construction, rehabilitation priorities, and spending levels on the commercial navigation features and components of the inland waterways and inland harbors of the United States. The OT Administrator serves as an official observer from USDA.

Agreement on the Transport of Perishables

OT continues working with the State Department in defending the United States rights and interests under the United Nations Economic Commission for Europe (ECE) treaty entitled Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment Used for Such Carriage (ATP). OT's management of the ATP program also includes certification, upon request, of refrigerated trailers and containers for sale and service in ECE countries as well as representing the United States at meetings where proposed amendments are discussed. OT, in cooperation with other government agencies and private industry, studies such proposals and their possible implementation to ensure that any changes to the ATP are not detrimental to U.S. trade in agricultural products and refrigerated transport equipment.

During FY 1989, OT staff members represented the United States at two meetings of the Working Party on Transport of Perishable Foodstuffs in Geneva, Switzerland, where possible amendments to the agreement were discussed. They asked EC members of the agreement for additional information on EC-92 and its effect on the agreement. OT cautioned the other parties to the agreement about ill-advised proposals to expand the ATP to cover more perishables and their transport by sea and air.

The agency worked with the State Department and industry in analyzing issues and drafting position papers for these meetings. OT also studied possible modifications to the ATP regulations concerning equipment purchased by U.S. flag carriers overseas. OT issued two additional certificates for U.S.-built refrigerated transport equipment exported to Turkey and took steps to have the ATP test report and certificate forms renewed by the Office of Management and Budget. Over $719,000,000 in annual U.S. exports of perishables are potentially affected by the agreement.

Transportation 2020 / National Transportation Policy

To contribute to discussions regarding the Nation's future transportation needs and policy, OT reviewed and analyzed testimony given at 65 public forums held during 1987-88 as part of a broad-based national effort called Transportation 2020 which was begun by the American Association of State Highway and Transportation Officials. OT's findings, reported in "Beyond Isolation: The Future of Rural Transportation as Described at the Transportation 2020 Forums," have been widely disseminated by agencies and organizations concerned with rural transportation and/or development. This report was used by the U.S. Department of Transportation in preparation for a series of rural hearings held during FY 1989 as part of its National Transportation Policy development process.

OT focused on three international transportation issues of interest to agriculture: The Shipping Act of 1984, proposals to expand cargo preference, and cargo liability and insurance. OT suggested that DOT take an active interest in the review of the Shipping Act of 1984, and evaluate the benefits of service contracts to shippers and carriers. OT encouraged DOT to explore alternatives to expansion of cargo preference as a means of strengthening the domestic maritime industry. They also advocated adoption of the Hamburg Rules of international cargo liability and insurance, in order to promote an equitable allocation of risks consistent with modern ocean shipping practices.

Review of the Shipping Act of 1984

OT worked with agricultural exporters to ensure that their interests are represented in the work of the Advisory Commission on Conferences in Ocean Shipping. The commission will hold hearings in 1990 and make recommendations to Congress in 1991 on the Shipping Act. This act regulates the ocean liner industry which carries over $14 billion worth of agricultural products annually. Exporters are concerned about conference restrictions on rates and services which make these products uncompetitive in world markets. OT held two workshops, completed a proceedings, filed comments in support of loyalty contracts, and simplified ratemaking before the Federal Maritime Commission.

U.S.-China Maritime Agreement Excludes Bulk Grains

As a result of concerns expressed by the shippers and the Office of Transportation, the agreement now unfolding between the Peoples Republic of China and the United States will exclude bulk grains and other bulk products in the cargo sharing provisions of the agreement. Originally, U.S.-flag vessels had the potential to carry 1/3 of the grain exported to China if those vessels could match world rates. U.S. bulk ships, which today exist only to carry PL-480 grains, generally charge twice the going rate or more. Because that situation was unlikely to change, the Maritime Administration dropped bulk products from the agreement altogether. OT and FAS are cooperating in approving final versions of the pact.

Cargo Liability Insurance

At the request of agricultural shippers, OT has begun an investigation of ocean cargo liability insurance. The results of this inquiry will be included in comments to be submitted to the Department of Transportation. DOT is seeking opinions from interested parties concerning what actions, if any, it should take to update the present international treaty governing cargo insurance.

The domestic legislation implementing this treaty is known as the Carriage of Goods by Sea Act (COGSA). Shippers are, largely, interested in replacing COGSA with the Hamburg Rules. This proposed treaty would (1) more clearly define what a package is and increase the possible settlement for each package damaged or lost; (2) reconcile the different systems of liability between domestic rules, international rules, and between modes of transportation; (3) shift the responsibility for cargo loss or damage from the shipper to the entity at fault--which could be the shipper, the carrier, or the port. Shippers see this shift as an inducement to all parties to minimize loss and damage during transit, and possibly stimulate U.S. exports. Agricultural shippers are especially concerned given the potential for losses in transporting perishable food products.

Tariff Automation to Proceed at Federal Maritime Commission (FMC)

The Office of Transportation asked that the FMC be allowed to proceed with a proposal to offer greater public access to a new automated ocean freight tariff system. Private vendors objected because access would decrease demand for their services. Agricultural exporters will eventually have the capability to check ocean rates and services directly, without depending on a third party or ocean carrier to supply them.

OT Responds to Maritime Commission Report

The Office of Transportation provided the USDA response to the Fourth Report of the Commission on Merchant Marine and Defense. The Commission was formed in 1984 to address problems faced by the U.S. maritime industry, and the impact on military preparedness. The report is subtitled "A Plan for Action", and presents a wide ranging set of recommendations, that will cost the Federal government an estimated $13 billion over the next 11 years. The Commission is advocating extension of cargo preference to include 100 percent of all USDA PL-480 and section 416 cargoes. OT objected to expansion of cargo preference, as it would add significantly to the cost of operating and administering the food aid programs. In addition, expansion of this subsidy program will not address the major problem facing the maritime industry, the inability to be cost-competitive in the global market.

EC-92 Livestock Directive a Problem for Exporters

OT has been working with the International Air Transport Association (IATA), the Animal Transport Association (AATA), and with other USDA agencies (APHIS and FAS) to monitor EEC Directives that will affect live animal exports. The directives cause concern because they may require all live animals moving into or through EC countries to be removed from transport vehicles for inspection at a limited number of border ports. Such requirement would increase costs of U.S. livestock shipments to Africa and the Mid-East, as well as within the European Community, and could add undue amounts of stress to the animals. The effect could be to make U.S. livestock noncompetitive in certain markets.

C. TECHNICAL ASSISTANCE

Border Coordination Activities with Mexico

Logistical coordination of agricultural trade between the U.S. and Mexico was begun in the late 1970's when the volume of agricultural trade between the two countries increased significantly, particularly shipments of U.S. grain into Mexico by rail. Because of the logistical problems which resulted from this increased trade, CONASUPO, the Mexican government food purchasing agency, and the USDA agreed to establish a bilateral transportation group. This group meets once or twice a year to address these problems, and each respective agency has a coordinator to handle periodic logistical problems. The USDA border coordinator is a staff member in OT.

OT held a meeting in Mexico in May 1989 involving CONASUPO, USDA officials, and over 350 representatives of grain merchandisers, grain importers and purchasers, and rail carriers interested in improving the logistics of U.S.-Mexico agricultural trade. The USDA border coordinator is also involved on a daily basis with border transportation problems relating to inspection, and customs or border interchange which may develop on U.S. agricultural exports to Mexico.

Chinese Breeding Pigs Arrive in U.S.

The Agricultural Research Service (ARS) recently acquired 144 breeding pigs from the China National Breeding Stock, People's Republic of China (PRC). The Chinese breeds are famous for farrowing litters twice the size of U.S. breeds, up to 30 pigs per litter.

OT assisted the ARS in the development of transport specifications and provided technical assistance for transporting the pigs from the Chinese mainland to the Harry S Truman Animal Import Center in Fleming Key, Florida. The pigs, worth almost $2 million, arrived safely in Fleming Key after a 23-hour trip from Shanghai, PRC, with one refueling stop in Anchorage, Alaska.

Frozen Bass to Japan

An exporter of aquaculturally-produced, flash frozen bass from Aurora, North Carolina recently inquired about information on how to move 40,000 pound lots to Yokohama, Japan, by air. In lieu of air transportation, traffic management specialists suggested shipping by ocean refrigerated container at possibly lower rates. The move entailed trucking to Atlanta, followed by the use of the new expedited double-stack train service to Long Beach, California, and finally loading the container aboard a containership. Loading aboard the containership and dispatch to Yokohama occurred within 8 hours. Total service time is 12 to 14 days. This service level was acceptable, and the shipper was provided with carrier contacts to make shipping arrangements. The exporter is now regularly moving cargo to Japan using the suggested services.

Shelflife of Food Products in Saudi Arabia

Saudi Arabia recently reduced the shelflife expiration dates on processed food products by as much as one year. This makes it extremely difficult for U.S. exporters to be competitive with the Europeans on many products. The problem remains a delicate one in that the Saudis feel they need very stringent standards to set an example for the region. An OT organized team to Saudi Arabia felt the standards are more stringent than needed, but are considering the Saudi concerns.

The team recently submitted suggestions to FAS for resolving the issue. They recommended further research to determine the deterioration rate of various food products under conditions simulating the extremes encountered in food distribution in Saudi Arabia. This kind of information is needed as a basis for future discussions with the Saudis on extending the shelflife expiration dates for greater compatability with U.S. standards.

OT personnel participated in a food transportation and handling symposium while in Saudi Arabia and also surveyed the Saudi food distribution system at the request of FAS.

D. INFORMATION PROGRAM

OT Publishes Barge Movements on Mississippi River System

In cooperation with the U.S. Army Corps of Engineers, OT continues to monitor the volume of major agricultural products transported by barge along the Mississippi River System. Each week, OT records the amount of corn, wheat and soybeans that pass downbound through seven strategic locks and dams on the Arkansas, Illinois, Mississippi and Ohio Rivers. The monitoring of barge traffic assists OT in examining trends in the U.S. agricultural export market and providing policy guidance to the Department. The weekly data is released via OT's "Grain Transportation Situation" report and the Department's system for electronic communications.

Double-Stack Trains

OT updated the report on moving agricultural products by double-stack trains. An increasing number of trains with containers stacked two high on special railcars are available for the movement of products to both foreign and domestic markets. Carriers have created new hub centers and equipment to better handle the containers and maintain refrigeration in transit.

Transportation Guide for Agricultural Exporters

OT began developing a comprehensive guide in response to strong demand for information on the proper transportation, handling, and documentation of agricultural products. The guide will be produced in modules, each dealing with a different type of commodity or transportation situation. The first module is expected in FY 1990.

Protecting Animals During Air Shipment

OT recently released a Tip Sheet on "Protecting Animals During Shipment in Aircraft Baggage/Cargo Holds." Over $125 million worth of cattle, swine, baby chicks, and honeybees are shipped overseas in the lower or baggage compartments of passenger aircraft. Occasionally animal losses occur in the lower compartments due to poor ventilation and improper temperatures and handling. This Tip Sheet provides shippers and carriers information on the available ventilation in the cargo compartments of the more common commercial aircraft. It also gives the recommended handling procedures and calculations for determining the proper load size.

OT Completes Three Tip Sheets on Sanitation of Trucks Hauling Food

Recent publicity concerning the hauling of municipal garbage and trash in the same vehicles that haul food products generated numerous requests about regulations which may apply to this practice. In response, OT has completed three short publications addressing the topic. They are titled:

"Regulations Governing Sanitation in Vehicles Transporting Food"
"Regulations Governing Construction Materials and Cleaning Compounds for Vehicles Transporting Food"
"Regulations Governing Joint Use of Vehicles Transporting Food and Hazardous Materials"

These "tip sheets" provide shippers with (1) a list of regulations and their enforcing government agencies, (2) a list of publications and where they can be obtained, and (3) contact points within the government for additional information. These OT publications are being publicized through the trade associations and directly distributed through the mail and electronic information services.

Periodic Publications

The "Grain Situation Report" is a weekly report, covering developments affecting the internal movement of grain products and providing statistical information on rail, barge, and vessel loadings.

The "Truck Cost Report" is published monthly and includes estimates of fleet and owner-operated vehicle costs for transporting fruits and vegetables.

To keep OT constituents informed about current issues and events related to rural transportation, OT releases on a monthly basis a "Rural Transportation Update" via electronic means. The "Update" covers current news, legislative and regulatory issues, media releases, and events of interest.

E. TECHNOLOGICAL RESEARCH

Study to Reduce Produce Damage During Transportation

OT began a research project at its Beltsville laboratory with the goal of reducing the damage occurring during the transportation of grapes and strawberries. These high-value commodities incur more than $20 million in shipping damage each year.

OT initiated this study by Dole Fresh Fruit, the California Grape and Tree Fruit League, Fruehauf Corporation and the ARS. Using fruit donated by Dole, the experiment will simulate the shocks and vibrations felt by loads of fruit during transcontinental shipment. Once the exact cause of the damage is determined, OT will work with the truck trailer and carton industries to reduce damage levels.

Study Comparing Shipping Containers for Green Beans Completed

OT researchers recently assisted in a study that could save Florida green bean shippers over $500,000 annually. The study, conducted in cooperation with the ARS, compared green beans shipped in wax impregnated fiberboard boxes and wood wirebound crates. The research found that both types of shipping containers were suitable. However, the wax impregnated fiberboard containers gave more protection against weight loss and shriveling. Approximately 1.25 million 30-pound boxes of green beans are shipped from Florida each year to domestic and export markets. Presently, wood wirebound crates are used for most shipments. Fiberboard containers save 17 cents each compared to the wooden containers. Furthermore, shippers could benefit by higher prices for better quality product and receivers and consumers would benefit from increased quality and shelflife when the waxed fiberboard containers are used.

MONDAY, MARCH 5, 1990.

FOOD SAFETY AND INSPECTION SERVICE

WITNESSES

JO ANN SMITH, ASSISTANT SECRETARY FOR MARKETING AND INSPECTION SERVICES

LESTER M. CRAWFORD, ADMINISTRATOR, FOOD SAFETY AND INSPECTION SERVICE

CATHERINE ADAMS, ASSISTANT TO THE ADMINISTRATOR

RONALD J. PRUCHA, ASSOCIATE ADMINISTRATOR

WILLIAM J. HUDNALL, DEPUTY ADMINISTRATOR

WILLIAM L. WEST, DIRECTOR, BUDGET AND FINANCE DIVISION

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Mr. WHITTEN. We have with us today the Food Safety and Inspection Service. We will be glad to hear from you at this time.

Ms. SMITH. I am pleased to have this opportunity to testify before you to discuss the budget of the Food Safety and Inspection Service for the fiscal year 1991.

This is my first opportunity to appear before you as Assistant Secretary of Agriculture for Marketing and Inspection Services. I look forward to working with you and your staff and the committee in the years to come.

Food safety is a concern to consumers today. This is also true for USDA and especially for FSIS. FSIS has also had a vital role to play insuring food safety and protecting the public. They have an even more important role today.

FSIS administers a comprehensive system of inspections to insure that meat and poultry products moving in interstate and foreign commerce for use for human food are safe, wholesome and accurately labeled.

Increased trade with other nations has led to a greater awareness of food safety and the issues on an international level as well as domestically. We are working bilaterally and at the Uruguay Round of GATT negotiations to harmonize food safety standards so that trade restrictions are eased but food safety is protected as well as enhanced.

There are a number of important initiatives in FSIS's budget proposals to help accomplish the food safety goals. I would now like to have the Administrator of FSIS, Dr. Lester Crawford, provide you with a more detailed summary of FSIS's budget request.

I will remain available for any questions that you might have. Thank you.

Mr. WHITTEN. We will proceed now with Dr. Crawford.

Dr. CRAWFORD. Let me first introduce my colleagues here. Mr. Steve Dewhurst to the far left, as you know, is Director of the Budget Office for the department; Dr. Ron Prucha, our Associate Administrator of FSIS. Next is Dr. Catherine Adams, our special Assistant. Next to her is Bill Hudnall, our Deputy Administrator, Administrative Management. On the end of the table is Bill West, Director of Budget and Finance.

BUDGET OVERVIEW

I appreciate having the opportunity to appear before this subcommittee to discuss the budget of the FSIS for fiscal year 1991.

I would like to make a brief statement in summary of my remarks. The mission of FSIS is to ensure that meat and poultry products are safe, wholesome, and accurately labeled. We carry out this mission every day, in every federal meat and poultry plant in the country through our professional and dedicated staff of 9000 full time employees.

Since the inception of the meat and poultry inspection program, FSIS has evolved from a plant inspection operation to one that is today directly concerned with broader aspects of public health. For the last 15 years, the agency has been modernizing meat and poultry inspection to focus on hazards to public health, by introducing a succession of program improvements that will assure the American people of a safer supply of meat and poultry products, and, at the same time, provide them with reliable information relative to the nutritional qualities of the food they buy.

We believe our efforts have given consumers confidence our food supply is the safest in the world.

For fiscal year 1991, FSIS is requesting a total of $440.9 million. This total consists of $257.1 million for slaughter inspection; $108.6 million for processing inspection; $10.9 million for import-export inspection; $25.7 million for laboratory services; and $38.5 million for the Grants to States program. This is an increase of approximately $24 million over the amount appropriated for 1990.

Of the $24 million increase, $19 million is needed to maintain Federal inspection services at the current level. This increase will provide for the rising cost of Federal contributions to employees' retirement, health insurance, and workman's compensation funds, as well as for the rising cost of goods, services and employee salaries.

An additional $3 million is requested for inspection staffing in slaughter plants. National production of meat and poultry continues to rise annually, with the largest increases occurring in poultry slaughter.

The Federal Meat and Poultry Inspection Acts require inspection of every bird and every animal at time of slaughter. FSIS has little flexibility in determining staffing levels, and must provide employees to inspect every meat and poultry slaughter line operated by the industry.

An increase of $1.9 million is needed for the Grants to States program to maintain services at the current level. The 1967 Wholesome Meat Act and the 1968 Wholesome Poultry Act require state meat and poultry inspection programs to be "at least equal to" the Federal inspection program. If states choose to end their meat and poultry inspection programs or cannot maintain this standard, FSIS must assume responsibility for inspection.

Currently, our agency participates in Federal-state cooperative efforts for inspection of meat and poultry products and provides 50/50 funding to 28 cooperating states.

The total meat and poultry inspection program, which is vital to public health, cost the nation just $1.60 per capita in 1989. While the workload of FSIS has more than doubled since 1974, the budget, measured in constant dollars, has not grown. While steadily reducing the unit cost of inspection, FSIS has, at the same time, been improving its effectiveness.

AGENCY PRIORITIES

We have identified, Mr. Chairman, several priorities for our agency I would like to briefly discuss.

First, the hazard analysis and critical control points system or HACCP as it is called. This involves a prioritization of the potential risk and an increased emphasis for inspection at the critical control points.

A critical control point is a point in the production process where failure to control the process is likely to result in the manufacture of an unsafe or otherwise violative product.

HACCP is not a new concept; it is a food protection approach that has come of age. It is a simple, logical, and scientific "systems" approach that has proven itself through 18 years of operation and fine-tuning. It is designed to prevent problems from occurring, rather than to merely "catch" bad product at the end of the production line.

The second priority is labeling reform. We are seeking to develop clear principles for assessing nutritional claims and handling instructions in order to better inform consumers. We are also collaborating with the Food and Drug Administration on the adoption of responsible and accurate labels for all food products.

The third issue is international harmonization. We are working very hard with a variety of Federal and international agencies to achieve harmonization of health and safety standards around the globe.

There are scientific issues that we are likewise dealing with. We have had advances, as you know, in controlling residues. This has greatly benefited FSIS, industry and consumers. We are using risk management principles such as HACCP to identify and prioritize residue testing and insure food safety goals are met.

Next to the last, public information and consumer education. We continue to place a very high priority on educating consumers and we are submitting for the record our recent activities in that regard.

Mr. Chairman, this concludes my statement. Thank you for the opportunity to testify on the budget needs and priorities of our agency. I will be glad to answer questions you or the other members may have.

[CLERK'S NOTE.—Biographical sketches appear on page 284. Mr. Crawford's written testimony appears on pages 285 through 302. The Food Safety and Inspection Service explanatory notes appear on pages 303 through 321.]

ENFORCEMENT OF LAWS

Mr. WHITTEN. Thank you very much. We have dealt with this subject for many years. It is extremely difficult for your side of the table, as ours, to do as good a job as we would like.

I notice here we have had some success in at least catching some people violating the law, regulations, or what have you. I don't want those names, because we are not in the position to have hearings on both sides. I would like for you to submit to the committee for its own use those cases where you state what was involved.

Dr. CRAWFORD. I will be glad to provide that information for the record.

[The information follows:]

RECENT CASES OF INSPECTION ACT VIOLATIONS

April 1989: A Minnesota company signed an agreement consenting to USDA monitoring and overweight required as a result of the company's selling adulterated sausage and other products.

May 1989: A Federal Court fined a New York company $50,000 and sentenced its president to three years of probation for holding and shipping rodent contaminated meat.

May 1989: A Texas plant owner was convicted and fined $5,000 for adulterating sausage by adding soy and sodium nitrate to sausage products labeled as fresh pork sausage.

June 1989: Federal inspection and grading services were withdrawn from an Illinois firm for ten years following conviction of the firm's president for mail fraud and attempted bribery of meat graders.

August 1989: A New York company was fined $30,000 for holding and shipping adulterated product, specifically: boneless beef held under unsanitary conditions, poultry contaminated with rodent gnaw marks and feces, and uninspected pork chops.

August 1989: A Pennsylvania firm was fined $75,000 for selling putrid and decomposed canned hams that were unfit for human consumption.

September 1989: A federal court issued a five year consent decree and order permanently enjoining an Idaho company from operations in violations of the federal inspection laws. The owner had been abusive and belligerent towards inspectors and had refused to allow them to review his facility.

September 1989: The owner of an Arkansas establishment was fined $1,500 and placed on three years probation for slaughtering and selling uninspected meat.

October 1989: A Minnesota firm was fined $1,250 for removing labels on a beef product correctly identified as "beef patty mix" and relabeled it "ground beef".

October 1989: The owners of a Virginia company were ordered to pay $11,000 and placed on probation for selling misbranded and uninspected pork product with intent to defraud.

November 1989: A California company was fined $30,000 for selling ungraded beef mislabeled as "USDA Choice".

November 1989: The president of a Michigan firm was fined $10,000 and placed on three years probation for selling corned beef briskets with excess added water.

December 1989: A Missouri firm and its officers were ordered to pay $285,000 in restitution to the state and sentenced to 2 years in prison for selling adulterated meat to hospitals, schools and prisons. The charges included illegal addition of kidneys, lungs, fat, hearts, gizzards and ground poultry necks, as well as product labeled as "Pet Food" to its ground beef and sausage. Product was chemically treated to disquise off condition. The State of Missouri is seeking an additional $800,000 in damages.

March 1990. A Tennessee company was fined $2,500 for transporting and selling misbranded beef products to two mental institutions, a school for the deaf, and a penitentiary operated by the State of Tennessee. The product consisted of ground beef that contained soybean additives and water.

IMPORT INSPECTION

Mr. WHITTEN. I also notice that you—the law has gotten stronger, as I understand it on your ability to inspect importers. In a general way what has been your finding there? How often do you check importers? Do you check their product over here? Do you check it before they export?

Dr. CRAWFORD. Mr. Chairman, the way that operates, as you know, following the 1985 farm bill amendments, we were obligated to put in place a program where we assessed each country on an annual basis as to its eligibility to ship meat or poultry products to the United States.

What we do when an eligible plant sends us products is to reinspect it on a random basis at the border. We have found off and on over the last five years problems with imported products in terms of residue; sometimes some packaging problems.

Generally, for those countries that are eligible to ship, the levels of these violations are similar to what we find in domestically-produced products. We can make those findings also available.

Mr. WHITTEN. Would you give us the details on that.

Dr. CRAWFORD. I will be glad to provide that information for the record.

[The information follows:]

RESIDUE VIOLATION RATES 1989

–	Number of samples	Violations	Violation rate
All imports	13,517	16	.001
Domestic Program:			
Livestock	32,370	115	.004
Calves	8,700	40	.005
Poultry	10,574	48	.005
Swine	12,470	51	.004

Mr. WHITTEN. I have a list of questions here. I understand Mrs. Smith has another obligation. I will yield to you at this time.

Mrs. SMITH of Nebraska. That is very kind of you, Mr. Chairman. Thank you very much.

Secretary Watkins is testifying in the next room. I am a ranking member on that committee. I appreciate you being here.

Let me say a special welcome to you, Ms. Smith. I got acquainted with Jo Ann Smith long ago. She was such an outstanding person of the National Cattlemen Association. You all know I come from the beef state. I am careful to mention that.

You did such a great job there. I am delighted you are using your great talents and experience here.

Good to see you back, Dr. Crawford. Dr. Prucha, Dr. Adams, Mr. Hudnall, Mr. West, glad to see you all.

I understand we imported some two and a half billion pounds of meat last year. After you inspected it, we only turned down one half of one percent. I would ask this of either of you who want to answer it.

Does the FSIS inspection, does it guarantee the safety of this meat? Do you think it is adequate? Do you think you have enough money to adequately inspect it?

Dr. **Crawford**. Yes. We believe we do. We have asked for modest increases over the years. Our sampling program which basically is reinspection at the border, as you know, also requires taking samples of the product and sending it to our labs for evaluations such as chemical residue evaluations, also microbiological evaluation.

We have been able to keep up with that. We can assure the product is safe and wholesome.

INPLANT RAPID TESTS

Mrs. **Smith** of Nebraska. I see you talk about the—about rapid inspection, such as SOS and STOP inspections. I am aware of criticisms about the accuracy and adequacy of these systems. Do you want to comment on that?

Dr. **Crawford**. We have been endeavoring, as you know, over the past several years, particularly in the last five years, to develop rapid tests that can be used on the slaughter line and as the product is being processed. We want them, as you know, to be able to be used in the plant so we can make a determination at that point whether or not the product is wholesome.

We have been successful in developing very good tests for sulfamethazine in pork that can be used on the line. We also have developed an extremely rapid test for the Listeria organism for all the products we regulate. We have any number of others we have recently developed.

We have had good cooperation from other agencies, including FDA and the Agriculture Research Service.

We have no test we would not like to be more rapid. Some of them are about as accurate as you could expect, but the faster the tests can be run, the better, both in real time and service to the industry and consumers and also in costs.

So we need to continue the research and development work that has been initiated in this country in that regard.

I think the consumers are demanding that. In order for us to do our job in a timely fashion without holding up products in warehouses, we need ever better tests.

BUDGET REDUCTIONS

Mrs. **Smith** of Nebraska. This year I know, due to sequestration, your budget was cut about $6 million. Where did you make those cuts? Did you have to reduce your inspection activities in order to do it?

Dr. **Crawford**. No. We have not reduced inspection activities.

As you know, we are obligated to provide a competent level of inspection that cannot be compromised. We are winding up with an anticipated short fall in funding, and we have submitted that anticipated short fall, our estimates of it, and supporting documentation to our department. It is now being considered by the Administration with regard to what is to be done.

It looks like we may come up with about four days at the end of the year that we can't fund. In the past, we have proposed a furlough. It looks like it may be possible that does happen this year in the absence of restored funding of some sort or the other. That is the situation we find ourselves in at the present time.

FOOD LABELING

Mrs. SMITH of Nebraska. Now, I just have a couple more questions with regard to food labeling.

I understand there is a good deal of discussion going on in USDA currently regarding food labeling for poultry and fish inspection. Would you comment about that briefly?

Dr. CRAWFORD. We have a couple of things going in that regard. These are being done in cooperation with FDA. We cooperated in four regional public hearings on the labeling of food. These were held in four different cities in the United States where we asked citizens and industry people and consumer organizations and whomever to come before us on the basis of simply signing up and making their testimony.

That exercise was very interesting to us. It seemed to indicate that there is great interest in mandatory nutrition labeling, in national uniformity of labeling between states. There also seems to be interest in some preapproval system for health claims or health messages on foods.

We are analyzing that along with FDA and seeing where that leads us. Both agencies have contributed to a National Academy of Sciences' contract in which we are asking the Academy to give us a report in which it would make recommendations as to how we might improve food labeling in this country and also harmonization perhaps between the two agencies.

That report will be due in October and we look forward to those recommendations as guiding us where we should go in food labeling reform. We do not have authority for fish inspection. So, we have not specifically addressed that in our agency, although these public hearings and the National Academy of Sciences will address that because between us and HHS, we do have an interest in that regard.

HACCP INSPECTION METHODS

Mrs. SMITH of Nebraska. There is a good deal of interest and concern in this committee about the fact we don't have fish inspection.

Now, this HACCP you talk about, prioritizing the risks, how would that fit in with poultry and/or fish inspections?

Dr. CRAWFORD. The way that would happen is that this is a systematic approach that has been developed down through the years in various countries and now has sort of come of age.

Our landmark 1985 National Academy of Sciences study on meat and poultry inspections, which you are familiar with, did suggest that we proceed as fast as we possibly could with implementing HACCP as an inspection program.

We have now announced last year that we are proceeding to a two-year planning cycle to impose HACCP, the principles it stands for, and all of that into our inspection program at all levels, not just processed products, but also in the slaughter operations and everywhere we do business, because, in effect, what it does is a risk analysis of all the various critical control points in the production of food. It provides for that analysis. It provides for setting up a written plan of dealing with those points. Then it enables the inspection force to regularly check on them, and to do that on a basis we believe will provide us with a much more efficient inspection system and which also will give us what everyone seems to be asking us to do, and that is to do a fail-safe food inspection program that guarantees wholesomeness and safety of the product in such a way as never before.

So we are proceeding as fast as we can with as much communication as we can with the industry, consumers, and other interested organizations.

We intend and will keep the committee informed of each step along the way. This is a two-year process. So we expect this time next year, and particularly the following year, to be able to report on the mechanics of just how it will work.

CODEX ALIMENTARIUS

Mrs. SMITH. Administrator Crawford, I am aware of your belief that the U.S. must continue to work with existing internal organization in the "harmonization" of international health and sanitary regulations. As well, I note that you are the U.S. Coordinator for Codex activities.

Administrator Crawford, would you explain to the committee the importance of the Codex organization?

Dr. CRAWFORD. Parented by the Food and Agriculture Organization of the World Health Organization, Codex works to establish international food standards which will protect public health and facilitate fair trade. The work of Codex is vital to U.S. efforts principally in world trade.

Through Codex, many potential barriers have been eliminated by countries working together in a scientific arena to remove differences. It is our belief that the international hormone dispute would not have occurred if the Codex Committee on Veterinary Drug Residues had been formed in the early 1980's. The reasons for this belief are threefold: the scientific foundation of Codex, its ability to draw upon recognized experts, and the consensus building inherent in the Codex process.

Codex is recognized as the international standard setting organization for food products in the General Agreement on Tariffs and Trade proposal to harmonize international sanitary and phytosanitary standards.

Mrs. SMITH. What activities is the U.S. currently involved in at Codex?

Dr. CRAWFORD. The United States is an active participant in each of the approximately 205 committees of Codex, actually hosting five of the committees. International food standards are developed for raw as well as processed products. A shift is gradually occurring whereby Codex is slowly moving away from commodity specific standards to work in areas such as food hygiene, food additives and contaminants, food labeling, residues of veterinary drugs in foods, and similar areas. The United States is viewed as a world leader in such efforts.

PERFORMANCE-BASED INSPECTION SYSTEM

Mrs. **Smith**. Administrator Crawford, I am aware that the FSIS continues to move forward with the implementation of PBIS. I wonder if you would like to elaborate beyond your statement about the implementation of this program and its progress.

Dr. **Crawford**. The first phase of the installation of PBIS was completed in May, 1989, when the system began working in all area offices. Together with the Inspection System Guide, the plant profile, the plant-specific monitoring plans, and the corrective action system, PBIS has strengthened FSIS' inspection system in several significant ways. We now document inspection findings on the inspection assignment schedule; we document deficiencies and the action taken; we discuss deficiencies with the plant management at the conclusion of each inspection visit.

I am pleased with the current implementation of PBIS. I will note that Departmental review of the system found that it improved inspection uniformity, accountability, and quality.

FSIS is now scheduling, conducting, and collecting information on over one million inspection tasks monthly. This has given the Agency an unprecedented ability to monitor its regulated industry. We are concentrating on maximizing our use of the information. First, we are analyzing the data to assist in a continuing evaluation of the inspection program's design. Second, we are preparing to produce quarterly establishment reports which we can use to discuss with plant operators both the positive and the negative findings from the previous quarter.

Mrs. **Smith**. In addition, would you comment on the agency's effort to ensure that problems with this system are responded to and corrected? What difficulties with PBIS have been found and what response has been taken by the FSIS?

Dr. **Crawford**. FSIS has been devoting a considerable effort to ensure that problems with the PBIS are promptly identified, addressed, and resolved, We keep a detailed list of the inspection assignments requiring further action. These are delegated to the responsible offices for resolution. Each task has deadlines, and their status is reviewed monthly.

Agency experts in inspection procedures, information management, ergonomics, and other areas are continually reviewing procedures in the area offices and the plants to improve the program. Their findings are documented in a variety of reports and recommendations that we are pursuing. Concerns raised by inspectors and their union representatives are handled through established channels.

The acceptance of PBIS has increased greatly in the last year. Software improvements with requested changes are released approximately once a quarter after formal internal testing, and are followed by closely monitored field testing in selected area offices.

Mrs. **Smith** of Nebraska. Thank you very much. Again, Jo Ann, we are delighted to have you here.

IN-PLANT TESTS

Mr. WHITTEN. For the record, please provide a five year table showing the number of SOS, STOP, and CAST tests performed in each year.

[The information follows:]

	Calendar year—				
	1985	1986	1987	1988	1989
SOS	(1)	(1)	(1)	85,720	116,726
STOP	15,587	22,236	30.338	56,565	85,083
CAST	91,932	156,378	204,222	168,210	175,427
Total	107,519	178,614	234,560	310,495	377,236

[1] The SOS program began in 1988

RECALLS

Mr. WHITTEN. Dr. Crawford, during fiscal year 1989 you state that FSIS conducted 17 recalls of products involving six million pounds of products. Do you know how much, if any, of these products reached the consumer? How much of it was not returned?

Dr. CRAWFORD. During fiscal year 1989, FSIS monitored 18 recalls involving 6.1 million pounds of possibly violative product. About 5.2 million pounds were not returned or otherwise accounted for during recall. We cannot determine how much of this product may have reached the consumer, or was disposed of by consumers or at various distribution points as a result of publicity surrounding the recall actions.

REVIEW OF STATE PROGRAMS

Mr. WHITTEN. What activities do you conduct to assure that state meat and poultry inspection programs are "at least equal to" the Federal inspection program?

Dr. CRAWFORD. The Agency has recently implemented a new approach to the review and certification of state meat and poultry inspection programs. The new approach focuses on the various components that comprise an inspection system—laws, regulations, funding and financial accountability, resource management, facilities, equipment, labels and standards, plant reviews, enforcement of laws, special programs (such as species identification and residue control), and laboratory capability. Federal review of these components provides insight into how effectively and efficiently a state is carrying out its regulatory responsibilities.

Under this new approach, reviews are conducted using a variety of methods of data collection and evaluation, including a periodic on-site comprehensive review of the state program. The results of the review will determine when the next review should be scheduled.

HAZARD ANALYSIS CRITICAL CONTROL POINTS (HACCP) STRATEGY

Mr. WHITTEN. For the record, please submit a copy of the strategy paper for the HACCP study.

[The information follows:]

The Food Safety and Inspection Service's Hazard Analysis and Critical Control Point (HACCP) Implementation Study

Strategy Paper

Introduction

In October 1989, the Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA) issued its Concept Paper on the Hazard Analysis and Critical Control Point (HACCP) "systems" approach to food safety and process control (1). HACCP is a logical, simple, but highly specialized system for food safety control. The system is designed to prevent public health problems and regulatory violations from occurring.

The Concept Paper announced FSIS' intent to implement HACCP in meat and poultry inspection operations as the conclusion of a decade-long analysis of the need for modernizing inspection operations. The Concept Paper also defined and interpreted HACCP principles as they will be applied by the Agency over the next several years. This second paper further defines HACCP and presents the strategy for the two-year HACCP Implementation Study that will help to determine the plan for HACCP application in meat and poultry inspection. This paper includes:

I. An outline of the HACCP Implementation Study;
II. Projected training needs for the Agency and the industry;
III. Projected timetable for the major elements of the HACCP Implementation Study;
and
IV. A glossary of terms.

I. The HACCP Implementation Study

As stated in the Concept Paper (1), FSIS recognizes that HACCP can be used to control any point in the food production system where a hazardous and/or critical situation could result, whether it be from contamination with pathogenic microorganisms, chemical residues, or physical objects; economic adulteration; or other problems resulting from the raw materials, any process, use directions for the consumer, storage conditions, or the distribution system. In short, HACCP is a control system that will be applied to prevent unsafe, unwholesome, or adulterated food from reaching consumers.

The long-range goal for the Agency is to implement HACCP in all applicable meat and poultry inspection activities. FSIS will conduct a two-year study to determine the process for HACCP implementation.

The Agency recognizes the importance of recommendations from the public, private, and regulatory sectors; including its own personnel, consumers, other Federal/State regulatory agencies, and the industry. Therefore, the Study will be divided into the following four stages:

(A) Consultations and public hearings;
(B) Workshops for the development of model HACCP plans and consideration of potential regulatory changes;
(C) Two-stage in-plant testing; and
(D) Evaluation.

FSIS intends to follow the recommendations of the National Academy of Sciences (NAS) and develop model HACCP plans through industry/regulatory agency cooperation (2). Further, FSIS will utilize the recommendations of the National Advisory Committee on Microbiological Criteria for Foods, which defined the seven principles of the HACCP system (3). These are:

(a) Assess hazards associated with each operational step of growing, harvesting, raw materials and ingredients, processing, manufacturing, distribution, marketing, and consumption of the food; and identify the prevention measures that can be taken at each step to reduce the risk to acceptable levels.
(b) Determine critical control points (CCPs) required to control the identified hazards.
(c) Establish the requirements that must be met at each CCP.
(d) Establish procedures to monitor each CCP.
(e) Establish corrective action to be taken when there is a deviation identified by monitoring of a CCP.
(f) Establish effective recordkeeping systems that document the HACCP plan.

(g) Establish procedures for verification that each HACCP system is working correctly. Verification measures may include biological, physical, chemical, and sensory methods; and when needed, establishment of necessary criteria.

The scope of the study will include selected slaughter and processed products or processes. Several products or processes may be considered together as a category. The products/processes and categorization of products/processes to be considered during the course of the study will be further defined during the consultative phase of the HACCP Implementation Study. Animal production practices may be considered, as appropriate and possible.

Early during the course of the two-year study, a specific plan of operations will be developed. This plan will list each workshop as a project and identify, for example, the project leader, objective, background, method to be used, schedule, data management, and success criteria. A separate plan of operations will be developed following the two-year study for HACCP implementation in meat and poultry inspection operations.

The following is a detailed outline for the HACCP Implementation Study:

A. Consultation and Public Hearings

Consultations with the groups identified below will be simultaneous. Each consultation and public hearing will begin with an educational presentation of HACCP principles and applications.

Consultations and public hearings will be orchestrated and conducted by members of the HACCP Core Team led by the Executive Director Dr. Catherine E. Adams, Assistant Director Mr. Mark Manis, Dr. Wilson S. Horne, Dr. Marvin A. Norcross, and Mr. William Hudnall. Ms. Denise Clarke and the Information and Legislative Affairs staff under the direction of Mr. David Schmidt will support the Core Team in arranging the consultation sessions and assisting with educational efforts.

1. Consult with FSIS personnel.

Specific issues to be addressed during the consultations with FSIS employees include: the Agency's HACCP training program; the products/processes and categorization of products/processes to be considered during the course of the study; the development and testing of model HACCP plans for specific categories of products/processes; and the potential effects of HACCP-based inspection on the Agency, the public, and the industry.

Consultations will be held with area supervisors and with circuit supervisors. Regional directors will participate in meetings held within their region.

Consultations will also be convened with Agency employees throughout the country. An informational videotape will be developed and used for meetings in the field which will include examples of HACCP applications in plant operations. The videotape will also be made available to other interested groups. Consultations with Headquarters staff will be held through normally scheduled staff meetings. The opportunity for consultations will also be available for other government agencies.

2. Consult with employee and other professional organizations.

Specific issues to be addressed during the consultations with employee and other professional organizations include: the products/processes and categorization of products/processes to be considered during the course of the study, plans for HACCP training, the development and testing of model HACCP plans for specific categories of products/processes, and the potential effects of HACCP-based inspection on Agency personnel, the public, and the industry.

3. Consult with consumer and other public interest groups.

Specific issues to be addressed during consultations with consumer and other public interest groups include: the opportunities for HACCP training, the products/processes and categorization of products/processes to be considered during the course of the study, the development and testing of model HACCP plans for specific products, and the potential effects of HACCP-based inspection on the public, the Agency, and the industry.

4. **Consult with the industry.**

Specific issues to be addressed during consultations with the industry include: plans for HACCP training, the products/processes and categorization of products/processes to be considered during the course of the study, the development and testing of model HACCP plans for specific products, and the potential effects of HACCP-based inspection on the industry, the Agency, and the public.

5. **Convene one or more public hearings.**

Specific issues to be addressed during the public hearings include: the HACCP Implementation Study, the products/processes and categorization of products/processes to be considered during the course of the study, the development and testing of model HACCP plans for specific products, and the potential effects of HACCP-based inspection on the public, the Agency, and the industry.

B. Workshops for the development of model HACCP plans and consideration of potential regulatory changes

FSIS/industry workshops will be held to develop model HACCP plans and to determine regulatory changes that might be necessary to accommodate the HACCP inspection framework. Workshops will be facilitated by a "Special Team" led by a "Special Team Director." The Special Team, outlined below, will orchestrate all workshop sessions, prepare all needed materials, and lead the sessions. The Special Team will work closely with the regulated industry, industry trade associations, and other interested groups in preparing for and conducting these sessions, as recommended by the National Academy of Sciences (2). The HACCP Core Team will serve in an oversight and advisory capacity for the Special Team and the workshop sessions.

1. **Develop a specialized team of FSIS staff to serve as facilitators in meetings and workshops.**

Approximately five Special Team members and a director will be selected as soon as possible. The Special Team members will be selected based on specific criteria developed by our Program Training Division. Examples of special skills for selection include leadership, communication, and a strong background in FSIS operations and regulations. The director, an FSIS executive (GM-15) located in Washington, D.C., will be selected by the Core Team. All members should anticipate serving for the duration of the HACCP Implementation Study.

The Special Team, particularly the director, will work closely with the Core Team throughout the Implementation Study.

2. **Conduct a series of HACCP workshops with industry and FSIS staff to develop model HACCP plans for selected meat or poultry products/processes or categories of products/processes.**

These workshops will be modeled after the Agency/industry workshops convened by the National Marine Fisheries Service (NMFS) in its development of a HACCP regulatory scheme for fish and seafood products (4).

Workshops may be sponsored or cosponsored by the industry. The workshops will be product or process specific and will be open to all manufacturers working with those products or processes.

The objectives of workshop participants, facilitated by the Special Team, will be to: (a) understand HACCP principles and applications, (b) develop a model HACCP plan for a specific product/process or category of products/processes, including identification of critical control points and methods for controlling, monitoring, and verifying control at critical control points; and (c) identify regulations/laws which may need to be recast in order to accommodate the HACCP regulatory framework.

A Workshop Steering Committee of industry participants will be established for each workshop. This Workshop Steering Committee will be responsible for refining the model HACCP plan in conjunction with the Special Team.

It is apparent that model HACCP plans may often need to be tailored to operations in a particular plant or on a particular production line. The Agency maintains that approval of HACCP plans for plants should not be a Headquarters' function, due to the potential volume of HACCP plans needing approval.

C. *Two-stage in-plant testing*

Testing of model HACCP plans will occur in two stages. First, a brief site evaluation will be conducted, followed by a trial implementation. The Special Team will conduct all in-plant testing. While in each plant, the Special Team will work with the in-plant inspection employees and will ensure that they are knowledegable about HACCP operations.

1. Site evaluations

The in-plant testing shall begin with a brief site evaluation to "estimate" the effectiveness of the model HACCP plan if it were fully implemented. The Special Team will meet with FSIS employees and will reconvene with the Workshop Steering Committee that developed the model HACCP plan and discuss the results of the site evaluation. The model HACCP plan may be refined based on the site evaluation.

To the extent practical, site evaluations will be conducted in several plants of differing sizes and complexity of operations.

2. Trial implementation

The refined model HACCP plan will be implemented on a trial basis in two or more plants participating in the site evaluations. Again, plants of differing sizes and complexity of operations will be selected for the trial implementation.

The trial implementations may require some equipment modifications. Plants chosen for trial implementation will be volunteers and will be selected by the Special Team and the Core Team based on criteria developed during the consultations. FSIS inspection during the trial HACCP implementation phase would be conducted using the model HACCP plan and usual inspection procedures. The model HACCP plan may be modified again based on results of the trial implementation.

D. *Evaluation*

Evaluations for both the model HACCP plans and for the Agency's process for HACCP implementation will be conducted according to predetermined criteria that will be developed and stated in the plan of operations. Evaluations will be performed by the Special Team in conjunction with FSIS program staff. The results will be reviewed by the Core Team and the FSIS Administrator.

1. Evaluation of the trial implementations.

The trial implementation of each model HACCP plan will be evaluated. If the trial implementation is successful the model HACCP plan will be finalized.

2. Evaluation of the Agency's process for HACCP implementation.

The Special Team will evaluate the process for implementing HACCP at the conclusion of the two-year study. This evaluation will determine whether the workshop format for the development of model HACCP plans was successful. The results will be reviewed and discussed by other FSIS employees, the Core Team, and the Administrator in light of comments received by the Agency during the consultations. Further consultations may be convened with interested parties to discuss the results.

The Core Team will make a recommendation to the Administrator regarding the implementation of HACCP for all appropriate meat and poultry inspection activities. The Administrator shall make the final decision whether to proceed with full implementation and will determine the process by which to proceed.

II. *Projected Training Needs for the Agency and the Industry*

The NAS (2) attributed the successful application of HACCP to low-acid canned foods to two major elements: (a) inspectors were trained in HACCP principles and (b) the industry and government worked cooperatively together. FSIS recognizes the need for HACCP training of our inspection workforce and a uniform understanding of HACCP in the regulated industry.

A. HACCP training for FSIS personnel.

Training will be a critical element of the HACCP Implementation Study and the eventual implementation of HACCP in meat and poultry inspection. The Agency recognizes that for HACCP to be implemented successfully, every in-plant inspection employee must be familiar with the concept of HACCP as applied to inspection and must understand the application of the HACCP system in a plant.

The FSIS Program Training Division is responsible for training all in-plant inspection employees. Preliminary courses to provide a general background on HACCP are currently being taught at the FSIS Donald L. Houston Training Center at College Station, Texas. More intensive HACCP training programs will continue to be developed by the Program Training Division for the inspection workforce.

Through the consultations and through the Program Training Division, the minimal level of training for each classification of in-plant inspection employee will be determined. Courses will be offered to all FSIS employees who require HACCP training.

The Special Team and some program staff will require extensive training. The Program Training Division will organize specialized training programs, which shall emphasize hands-on experience and targeted instruction by HACCP experts.

B. HACCP training for the industry.

The International Commission on Microbiological Specifications for Foods (ICMSF) identified comprehensive and specific training needs for industry in-plant employees, supervisors, and management (5).

The Agency will encourage the industry to convene training sessions that could include instruction by FSIS staff. Consistency in the understanding of HACCP principles and their intended application will be important to the success of this cooperative program for HACCP implementation in meat and poultry inspection.

III. *Projected Timetable for Implementation of the Major Elements of the HACCP Study*

Initial consultations and meetings with employee and other professional groups, FSIS staff, consumer groups, and the industry will be completed no later than July 1990. The public hearing(s) will be among the last of the initial consultations and will be scheduled for approximately July 1990. Joint industry/Agency workshops to develop model HACCP plans will begin after July 1990 and will continue through late 1991. Consultations and meetings with interested parties shall continue throughout the two-year HACCP Implementation Study.

The number of products/processes and the product/process categories to be addressed by the workshops will be determined through the consultation and public hearing process.

The Special Team and the Special Team Director shall be selected as soon as possible and shall complete the specialized HACCP training by June 1, 1990. General HACCP training will continue to be conducted by the Program Training Division throughout the course of the two-year study.

Site evaluations and trial implementation testing shall be completed as time permits during the two-year period of the HACCP Implementation Study. The Agency recognizes the need for flexibility in the intended two-year timetable for the study; for example, the Implementation Study shall not conclude until adequate in-plant testing of products or process categories has been completed and an adequate number of products or process categories have been considered. ☐

IV. Glossary of Terms

The Agency:	The Food Safety and Inspection Service, U.S. Department of Agriculture.
Core Team:	The five FSIS staff members identified in the Concept Paper (1), who provide leadership for the HACCP Implementation Study and implementation program, as well as for the HACCP Steering Committee.
Critical Control Point (CCP):	Any point or procedure in a specific food system where loss of control may result in an unacceptable health risk or regulatory violation.
Food Safety:	Issues usually addressed through biological, chemical, or physical criteria, and distinct from issues relating to quality.
FSIS:	The Food Safety and Inspection Service.
HACCP:	Hazard Analysis and Critical Control Point — A specific inspectional approach to control biological, chemical, physical, and/or economic adulteration in foods. It is a two-part process done on a product-by-product or process-by-process basis. The first deals with defining the consumer hazards associated with a specific food product relative to the intended end use of the product. The second part deals with flow charting each operational step of the food manufacturing process, defining the hazard associated with each step and assessing its relative importance, identifying the critical control points of the manufacturing process, determining the control measures that can be used to eliminate or reduce the hazard to acceptable levels, determining the monitoring procedures either by observation or measurement to determine that the hazard is controlled, delineating the specific manufacturing records necessary for monitoring to ensure that hazards are being controlled, and identifying the necessary verification procedures.
HACCP Implementation:	Incorporation of HACCP principles into meat and poultry inspection operations.
HACCP Implementation Study:	The two-year process for determining how HACCP will be incorporated into meat and poultry inspection.
HACCP Steering Committee:	The Executive Team of FSIS.
HACCP System:	The result of the implementation of HACCP principles in the form of a HACCP plan.
Hazard:	A chance for, or the risk of, an unacceptable biological, chemical, physical, and/oreconomic property in a food product that may cause consumer illness or distress.
Model HACCP Plan:	The result of an industry/Agency workshop that details the process flow for a specific product/process category and identifies critical control points; methods for control, monitoring, and recordkeeping at critical control points; and methods for verifying that control is demonstrated at the critical control points and for the finished product.
NMFS:	The National Marine Fisheries Service.
Regulatory Violation:	A violation of FSIS' regulatory charge to prevent unsafe, unwholesome, or adulterated meat or poultry products from reaching the public.
Site Evaluation:	The initial and brief evaluation of a Model HACCP Plan in a plant conducted by the Special Team to estimate the effectiveness of a Model HACCP Plan for a product/process category.

Special Team/ Special Team Director:	Selected Agency employees trained to facilitate industry/Agency workshops for the development of Model HACCP Plans. The Director will be appointed to lead the Special Team.
Training Center:	The FSIS Donald L. Houston Training Center for FSIS employees at Texas A & M University, College Station, Texas, which operates under the direction of the Program Training Division.
Trial Implementation:	The experimental testing of a Model HACCP Plan in a volunteering plant conducted by the Special Team to evaluate the potential effectiveness of long-term implementation of the Model HACCP Plan.
USDA:	The U. S. Department of Agriculture.
Wholesomeness:	The sound condition of a food product. The product is clean, free from adulteration, and otherwise suitable for use as human food.
Workshop:	Cooperative industry/Agency workshop for a select product/process category convened for the education of industry members, the development of a Model HACCP Plan, and the review of regulations for applicability in a HACCP framework.
Workshop Steering Committee:	The small group of industry members from a workshop for a particular product/process category charged with refining the Model HACCP Plan based on Agency feedback. The Workshop Steering Committee would have been granted the confidence of the industry members of the workshop to finalize the Model HACCP Plan based on Agency input.

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HACCP Core Team

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Scientific aspects

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FSIS January 1990

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REVIEWS OF POULTRY EXPORTING COUNTRIES

Mr. **Whitten**. As a result of amendments in the 1985 Food Security Act, you issued regulations assuring that the countries importing poultry to the United States must meet the same standards as U.S. poultry. You have stated that the five countries that currently import to the United States do, in fact, meet these standards. How often do FSIS personnel visit these countries to reassess procedures?

Dr. **Crawford**. FSIS conducts reviews in eligible exporting countries on a regular basis. The frequency of these reviews is performance-based guided by an automated system. This system keeps track of import inspection results for the country as well as plant review data from previous on-site reviews. I will provide a table showing the relevant data for 1989 regarding the poultry exporting countries.

[The information follows:]

Country	No. plants	Pounds presented	Country reviews
France	78	9,467	2
Hong Kong	1	865,502	2
Israel	28	1,320,935	1
Great Britain	2	88,946	2
Canada	43	5,548,136	([1])

[1] Under the U.S.-Canada Free Agreement, review activities in 1989 were performed in the origin country by its own auditors using a jointly-developed form. From time to time reviewers from the origin country accompany those in the receiving country for correlation purposes. During 1989, 43 Canadian plants shipped poultry product to the U.S. There were two such correlation reviews in Canada in which U.S. reviewers participated.

BUDGET SHORTFALL IN 1990

Mr. **Whitten**. Dr. Crawford, last year you testified that during fiscal year 1991 you intended to implement the Improved Processing Inspection Plan—IPI. We know that during fiscal year 1989 because of the overwhelming number of comments opposed to it, the agency last May withdrew the proposal. Your fiscal year 1990 budget request had a net reduction of almost $1 million because of implementation of the IPI. How will you manage the shortfall in fiscal year 1990.

Dr. **Crawford**. The withdrawal of the IPI regulation is one in a series of events that will make 1990 a very difficult budget year. In addition to the unrealized savings from IPI, the agency, like all other agencies, has to absorb rising employee pay, health, and retirement costs, as well as reduce spending for the Gramm-Rudman-Hollings sequester. To meet these requirements a freeze has been placed on hiring of personnel other than inspectors, and restrictions placed on travel and other expenses. If these measures prove to be inadequate, it may be necessary to furlough all employees at the end of the fiscal year.

PERFORMANCE-BASED INSPECTION SYSTEM

Mr. **Whitten**. Last year you implemented the Performance Based Inspection System—PBIS. GAO reviewed this system and found that although it was basically sound it needed more flexibility. For the record please provide us the details of the GAO recommendations and your response and what activities you have taken to date to resolve the problem.

Dr. **Crawford**. One of GAO's major recommendations was that FSIS apply life cycle management principles to the development of automated systems using formalized system development planing and monitoring techniques to ensure that periodic management, technical, and user reviews and approvals occur. We were committed to those principles before GAO began its investigation.

A second recommendation was that FSIS suspend additional major improvements in PBIS until it has developed a plan applying those principles. GAO also suggested that the Department's Office of Information Management Resources review the system. The Department's review in the latter half of 1989 confirmed that the software development approach used for PBIS was appropriate and sound, and that the system was helping to significantly improve processing inspection. The Department has given FSIS its technical approval to proceed with the system, and the Agency is in fact proceeding with plans to improve the current system and to design a nationwide system using life cycle management principles.

Other GAO recommendations addressed specific ways in which the system could be improved. The flexibility of the PBIS software system has been improved in several significant areas since May, 1989. We made major enhancements in speed, functionality, and ease of use for generating inspection schedules, printing, reports, graphics, and overall system responsiveness. Improvements in standardized reports, analysis, and hardware integration are also underway.

We have introduced a number of changes to give the inspector more flexibility in dealing with problems. First, the schedule now gives the inspector six to seven hours of scheduled tasks, leaving one to two hours of unscheduled time for the inspector to perform unscheduled tasks of the inspector's choosing. Second, the inspector may determine the order in which plants on a patrol assignment are visited. Third, the inspector may determine when to revisit a plant. Fourth, the inspector may adjust the schedule throughout the day by substituting unscheduled tasks for scheduled tasks.

Mr. **Whitten**. How much has been spent to date to develop, implement and operate the PBIS?

Dr. **Crawford**. The Agency spent $1.1 million for contractor support and equipment during fiscal years 1987–1989. During the same period, FSIS also used four employees at a cost of $233,000 for software development, management of the programming contract, and nationwide installation and support of the system.

STATUS OF IMPROVED PROCESSING INSPECTION PROPOSAL

Mr. **Whitten**. After you withdrew the IPI proposal, we know that FSIS is continuing to review whether to resubmit for publication the IPI proposal. Can you bring us up to date on the status of your reviews and what you expect to do in the future?

Dr. **Crawford**. While we are continuing to introduce improved inspection techniques such as PBIS and HACCP, we have no plans to renew the proposal for less than daily inspection of processing plants.

Mr. **Whitten**. For both fiscal years 1990 and 1991 please tell us how much of your budget is assigned to covering the costs of ADP prototyping for both the IPI and the PBIS systems. When will both of these prototyping systems be complete and what will be the ultimate costs?

Dr. **Crawford**. IPI was the term FSIS used to refer to the proposed changes in the overall processing inspection system, including the introduction of the automated PBIS system. Prototyping of this system is complete and no money will be spent for this purpose in fiscal years 1990 and 1991. The total contractual cost of the PBIS system was about $1.1 million.

ORGANIC ACIDS FOR MICROBIAL CONTROL

Mr. **Whitten**. Last year, Mr. Crawford, you indicated that FSIS was continuing several studies to determine whether the effectiveness of organic acids, such as acetic, lactic and chlorine, might be used to reduce microbial contamination on poultry. Have these studies been completed and can you tell us to date what the results have been?

Dr. **Crawford**. To date, approximately 12 red meat plants and 3 poultry plants have tested the use of organic acids—acetic and lactic—to determine if they are effective in reducing microbial contamination. Preliminary results have been favorable. However, certain critical issues have not yet been resolved. The Agency is evaluating how best to address each of these unresolved issues. Following this, the Agency plans to issue a policy on the use of organic acids on meat and poultry carcasses.

OIG AUDIT OF IMPORT PROGRAM

Mr. **Whitten**. The Office of the Inspector General conducted an audit of the Imported Meat and Poultry Program and found several problems related to foreign countries' inspection programs. Please bring us up to date on the status of what you have done to resolve these problems.

Dr. **Crawford**. The OIG has completed two audits of the imported meat and poultry inspection program in the last few years, the first in January 1987, and the second in March 1989. The purpose of the audits was to determine whether the controls used by FSIS to ensure that imported meat and poultry products meet U.S. standards are adequate. The audits focused on the procedures used by FSIS to determine county eligibility and to control the importation of satisfactory product.

FSIS determines the eligibility of a foreign county to export to the United States before it begins exporting and then reviews the eligibility on a continual basis. Eligibility is based on information obtained from documents submitted by the exporting country and from onsite reviews by FSIS technical experts. In addition imported products are randomly reinspected at port of arrival, with the level of inspection based on the past performance of the producing plant. These two activities serve as a check to assist in assuring continued country eligibility.

In 1979, FSIS changed the emphasis under which country information is collected from a procedure which used plant review data as the primary focus, to one which considers the performance of the entire foreign inspection system as it relates to five risk areas. OIG recommended that FSIS implement this system approach as quickly as possible to improve the method of documenting country eligibility. That work is proceeding as rapidly as resources permit.

A number of recommendations were made by OIG related to residue control programs conducted by foreign inspection systems. FSIS has collected base line residue control program information from exporting countries. This information contains data on livestock populations and agricultural practices that could potentially cause residue problems; lists of the drugs, agricultural chemicals and environmental contaminants to which livestock are exposed; laws and regulations related to residue controls as well as the orgnizations responsible for administering the programs; statistical and analytical support for the residue control program as well as current residue testing plans and past testing results; analytical support for the residue contol program as well as current residue testing plans and past testing results; analytical methods and quality control programs to detect residues; and follow up actions when residue problems occur. All information received is reviewed by FSIS technical experts with the exception of the drug and chemical lists. This latter information has been difficult to analyze because of language and nomenclature differences. We anticipate having this analysis done in the future by a pharmacological expert outside the agency.

FSIS has developed review guidance materials, and forms to document review findings for residue testing laboratories. Such reviews collect information to assure that countries are using approved methods that produce reliable results. Routine plant reviews collect data to assure sample collection procedures are random and select the correct tissue for laboratory analysis. When necessary FSIS statisticians consult with foreign officials on the design of residue sampling plans. Each year this body of residue information is correlated and analyzed to determine which countries will receive residue certifications as directed in the 1985 Farm Bill.

The OIG recommendations that addressed specific details of various country's residue control programs have been resolved and appropriate corrective steps taken.

The OIG recommended several changes to the import inspection program to strengthen controls designed to assure that only reinspected products move in U.S. commerce. OIG believes that FSIS must have knowledge of all imported products landed in the United States and take control over the product as soon as it is unloaded. To this end, the OIG recommended that FSIS take over control from U.S. Customs Service. FSIS and Customs explained each Agency's statutory responsibilities but were unable to convince OIG that certain recommendations were not possible.

FSIS has implemented the following procedural changes. The Customs entry number is now included in the Automated Import Inspection—AIIS—to provide for Customs reconciliation of imported product. A proposed rule has been published by FSIS to require that import reinspection take place at the first port of arrival in the United States. FSIS is currently revising the proposal to accommodate concerns expressed in public comments on the original proposal.

The outstanding OIG recommendations concerns the control procedures for Dimetridazole and the publishing of the final rule requiring import reinspection take place at the first port of arrival.

IMPROVED RESIDUE CONTROL IN 1990

Mr. **Whitten**. Over the years, it has become apparent that visual inspection of meat and poultry has its problems as a form of inspection, and that microbiological contamination and chemical residue contamination probably needed to be strengthened. Last year a significant increase in the budget request was made to strengthen control of residues in meat and poultry. Please bring us up to date on what activities you have done during fiscal year 1990 to strengthen your residue control programs.

Dr. **Crawford**. The 1990 Buget Request included an increase of $5.6 million for strengthening the Agency's residue control programs. However, it was necessary to redirect this entire increase to partially absorb the 1990 pay raise and health insurance increase and the unrealized savings from the non-implementation of the Improved Processing Inspection plan. Even with very limited resources, the Agency has taken positive steps to strengthen the residue control programs. I will submit that for the record.

[The information follows:]

Fiscal Year 1990 Activities To Strengthen the Residue Control Program

Established dairy cattle as a separate slaughter class for the purposes of inplant residue testing and control procedures in the National Residue Plan.

Made onsite visits to a representative number of slaughter and production facilities among 7 of the 11 producers who have a Memorandum of Understanding with FSIS for the control of chemical residues.

During FY 90, the microbiological confirmation of STOP positive cases was strengthened through the inclusion of a rapid enzyme immunoassay screening test for sulfamethazine. This is in addition to the extensive identification and measuring of antimicrobial tests routinely peformed.

Roaster pigs (40-125 lbs, 2-4 mo.) have been brought under the Surveillance Program to identify possible residue problems and examine the need for a separate slaughter class.

Established Formula-fed veal as a separate slaughter class and participated with other Regulatory Agencies and industry in discussions to promote solutions to residue problems in this slaughter class.

Established an Interagency Calf Antibiotic and Sulfonamide Test (CAST) Task Force, which has developed recommendations for the final CAST Rule.

Conducted a survey of aflatoxin in pork.

Worked on developing a chloramphenicol inplant test using urine or muscle tissue.

Participated in Interagency Working Groups for Residue Control with the Center for Veterinary Medicine. Efforts are being made to establish a similar working group with EPA.

The following is a list of newly developed methods as well as extensions, revisions and evaluations conducted either at the FSIS Technical Support Laboratories or by contract.

Developed, modified or improved analytical methods for extending the sulfonamide method to four additional compounds in tissue. In addition, mass spectrometry confirmation criteria were expanded.

Developed a determinative procedure for dibutyltin dilaurate for turkey and poultry tissue.

Developed a gas chromatography and mass spectrometry procedure for pyrethroids.

Extended the tissue method for ivermectin.

Developed a new determinative method for the analysis of the hydroxy metabolites of nitroimidazoles in swine and turkey muscle tissue.

Extended the present method to six additional pesticide analytes in animal fat.

Developed a method for aldicarb in tissue. Developed a mass spectrometry method for the confirmation of carbamates in liver and muscle tissue.

Developed an improved determinative method and a mass spectrometry confirmation method for benzimidazoles in tissue.

Developed a high pressure liquid chromatography method for the determination of novobiocin and virginiamycin in tissue.

Developed a determinative and confirmation procedure for dexamethasone in bovine tissue.

Evaluated an immunochemical method for the screening of the chlorinated triazines in animal fat.

RESULTS OF IN-PLANT TESTING PROCEDURES

Mr. Whitten. What kind of results are you finding from some of the in-plant testing procedures you have been doing in the past year?

Dr. Crawford. I will provide a summary of the results of in-plant testing procedures.

[The information follows:]

Sulfa-on-Site.—In calendar year 1989, 116,726 SOS tests were performed. In 113,404 tests, no sulfamethazine in urine was detected. In 2,172 tests, the level of sulfamethazine in urine was less than 0.4 parts per million. In 607 tests, the level was 0.4 to 1.3 ppm estimated. In 543 tests, the level was greater than 1.3 ppm.

CAST.—In calendar year 1989, 175,427 tests were performed. In 4,599 of the tests, the results were positive.

STOP.—In calendar year 1989, 85,083 tests were performed in-plant. The STOP test may not be used to condemn carcasses; laboratory confirmation of a positive result is needed for condemnation. After laboratory testing, 2,937 samples were confirmed to be violative.

Mr. Whitten. Are there a significant number of false negatives or positives?

Dr. Crawford. FSIS is eager to use the best technology available, but at this time we must settle for methods that produce false negatives or false positives more often than we would like. After one year, the SOS Test Program for assessing false negatives was discontinued because the rate was negligible and not worth dedicating laboratory resources for this effort. The false positive rate is approximately ten percent, however, laboratory analysis is conducted on suspected positives before disposition of animal carcasses is made. For the microbiological rapid tests, in the vast majority of cases, a positive inplant test result contains an antimicrobial compound but at a level below the tolerance established by FDA.

LABORATORY QUALITY ASSURANCE PROGRAM

Mr. Whitten. During fiscal year 1990 FSIS proposed to implement a new laboratory testing program. It would supposedly provide for a quality assurance program and implement a formal program for both biological and physical tests. What is the status of your proposal?

Dr. Crawford. This is one of the areas affected by our budgetary economies this year. We have been unable to allocate staff positions and funds to implement the Enhanced Quality Assurance Program.

Mr. Whitten. Please provide a cost breakout by the different types of laboratories, including costs for crediting these laboratories.

[The information follows:]

Cost of laboratory quality assurance

Federal laboratories:	
Eastern Laboratory, Athens, GA	$3,996,000
Midwestern Laboratory, St. Louis, MO	3,213,000
Western Laboratory, Alameda, CA	2,941,000
Total	10,150,000
Contract laboratories:	
Food Chemistry:	
Kentucky Department of Agriculture	690,000
Webb Technical Group, Inc	1,030,000
Subtotal	1,720,000
Residues:	
Webb Technical Group, Inc	730,000
NDRC, Inc	575,000
Subtotal	1,305,000
Total	13,175,000
Laboratory reviews and quality assurance:	
Type of Review:	
FSIS Field Labs [1]	9,700
FSIS Contract Labs	6,600
Accredited Labs [2]	304,600
State/Federal [3]	18,000
Total	338,900
Salmonella and listeria: Recognized laboratory program	23,196

[1] Includes two reviews to the Western and Eastern Laboratories.

[2] Includes 35 preaccreditation reviews and 13 regular accredited laboratory reviews and cost of check sample program for Quality assurance (160,000—Webb Food Lab).

[3] Includes eight state laboratory reviews (MD, VA, OH, GA, IL, VT, LA, and SD).

GAO AND OIG REPORTS

Mr. Whitten. FSIS has several open GAO and OIG reports. For the record please give a description of the major findings of these reports and the actions have taken to close them.

[The information follows:]

Imported Meat and Livestock: Chemical Residue Detection and the Issue of Labeling. (GAO Report RCED-87-142 issued 9/30/87)

GAO recommended that FSIS implement a continuous, systematic effort to identify and evaluate chemcials used in livestock production and processing operations of exporting countries and include them in the import testing plan; and undertake a risk assessment in regard to the potential of harmful residues in imported live animals.

The Agency is making progress, as scheduled, in implementing the 1985 Farm Bill provisions. This activity will enhance the acquisition of information concerning compounds capable of producing harmful residues in imported products.

Internal Controls: Program to Address Problem Meat and Poultry Plants Needs Improvement. (GAO Report RCED-89-55 issued 3/31/89)

GAO reviewed FSIS' Intensified Regulatory Enforcement (IRE) program for problem meat and poultry plants that chronically violate requirements for health, safety, and product standards. GAO recommended that FSIS develop and implement criteria for placing plants in the IRE program, and provide a special monitoring system for plants taken off IRE to assure that there is not a recurrence of the problem.

The Agency has an IRE directive containing instructions for manually entering and removing plants from the IRE program; and, work is currently underway on developing a stronger automated information support system to track plant performance. This work will take several years and GAO is being kept informed of our progress.

Food Safety and Inspection Service's Performance-Based Inspection System—Statement for the Record. (RCED-89-53 issued 7/31/89)

GAO's Statement for the Record presented information on the Performance-Based Inspection System, usually referred to as PBIS. PBIS is an automated inspection as scheduling and management information system that FSIS uses to direct meat and poultry inspection functions at processing plants.

GAO recommended that (1) FSIS operate PBIS "as is" and suspend additional investment in equipment and nonmaintenance-type software until a management control plan is developed; (2) document the basis for the risk factors and frequencies to schedule inspection tasks and (3) evaluate the adequacy of the PBIS-generated inspection tasks to ensure that they protect public health.

A report of the review by the Department's Office of Information Resource Management, dated 2/8/90, recommended lifting constraints on continued devleopment of a nationwide, integrated PBIS system provided life cycle management principles are appropriately employed. Documentation on risk factors and frequencies is expected to be completed by August 1990. The third recommendation regarding public health safety is ongoing.

National Audit of FSIS Meat and Poultry Inspection Program. (OIG Report 38607-1-At issued 9/26/86)

This audit found that the Agency is largely effective in fulfilling its food safety mission. The recommendation to develop a standard form for the Certified Calf Program can now be closed as the final rule, "Sulfonamide and Antibiotic Residues in Young Calves": Certification Requirement, was published March 2, 1990. The rule goes into effect May 31, 1990.

Follow-up Audit of the FSIS Imported Meat Process. (OIG Reprt 38002-4-Hy issued 3/29/89)

Auditors reviewed operations at the Agency's International Programs headquarters, three Import Field Office areas, government regulatory bodies, laboratories, and meat processing facilities in five countries. OIG determined that since their prior audit, FSIS' administration of the imported meat inspection process had improved, particularly in the areas of standards for facilities and equipment controls over refused entry.

The report made specific recommendations about foreign country control programs. These are complex technical issues that require a high level of professional judgment. FSIS has taken appropriate action in several cases.

The report also addresses controls on export certificates issued by eligible countries. The Agency believes that all of these countries adequately control the certificates, even though the systems differ in that each country's system is appropriate to its own organizational and administrative structure.

Monitoring and Controlling Pesticide Residues in Domestic Meat and Poultry Products. (OIG Report 38609-1-At issued 11/17/88)

The audit found that although the Agency had little authority to prevent the occurrence of pesticide residues in foreign produced product, the Agency had taken steps to solicit industry cooperation to this end. Additionally, FSIS participates with other agencies in educational and crisis prevention activities when potentially harmful residues are detected.

OIG recommended that FSIS strengthen its administrative controls in investigating the source and cause of violations. This process is spelled out in the Contamination Response System, part of the National Residue Program directive, scheduled for issuance September 1, 1990.

FSIS Exporting Procedures. (OIG Report 38097-1-At issued 2/5/87)

This review evaluated the merits of a whistle blower complaint about the certification of ducks for export to Singapore. As a result, OIG recommended the Agency issue Federal regulations governing the AQL program for all classes of poultry.

The impact of the National Academy of Science's report titled, "Poultry Inspection, The Basis for a Risk Assessment Approach" and the public's concern on salmonella contamination caused the Agency to shift its priorities delaying publication of the proposed rule. It is again being held in abeyance pending peer review by the Academy on the Agency's SIS for Cattle. The expected completion date of the Academy's study is July 1990.

1991 BUDGET INCREASE

Mr. WHITTEN. Your budget request for fiscal year 1991 is almost a $24 million increase. Please explain how you arrived at the estimate, including a breakout of costs for Federal pay, Federal retirement, inflation and non-salary related costs to the Federal programs and any other area.

Dr. CRAWFORD. In the 1991 budget request, there is $3.2 million for annual costs of previous salary increases and $4.7 million for the salary increase proposed for fiscal 1991. Federal retirement will add $1.6 million; health insurance, $2.5 million; and workmen's compensation, $1.1 million. Inflation on non-salary costs was estimated, using OMB estimated rates, at $3.3 million. Restoration of program levels prior to the Gramm-Rudman-Hollings sequester of 1990 will require $4.4 million. We have one program increase requested, $3.0 million for additional slaughter inspectors.

INCREASING POULTRY PRODUCTION

Mr. WHITTEN. Your inspection data provided in the explanatory notes continues to show a significant increase in the amount of poultry slaughtered. Please provide a ten-year table of the actual data on poultry slaughter. Also provide a corresponding table for red meat slaughter.

[The information follows:]

VOLUME OF MEAT AND POULTRY INSPECTED AT SLAUGHTER

[Millions of pound per fiscal year]

Year	Red meat	Poultry
1980	35,479	19,444
1981	36,963	20,305
1982	35,873	20,575
1983	35,738	21,179
1984	36,654	21,546
1985	36,193	22,980
1986	37,042	24,273
1987	36,300	25,700
1988	36,885	28,213
1989	37,400	30,268

AMOUNT OF FOOD CHEMISTRY SAMPLING

Mr. WHITTEN. We note that under Laboratory Services of inspection data the amount of samples analyzed for food chemistry went down approximately 8,000 from fiscal year 1988 to fiscal year 1989. Please explain in further detail why such a significant drop.

Dr. CRAWFORD. There is a statistical plan for food chemistry sampling of further processed products, which our inspectors follow. Inspectors may also take additional samples, according to their own judgment, to verify the correctness of plant procedures. During 1989, inspectors drew fewer of these discretionary samples than in previous years, which reflects the fact that these tests rarely detect any problems.

DISTRIBUTION OF GRANTS TO STATES

Mr. **Whitten**. Please provide the Committee a cost breakdown, by State, of the Grants to States Program for fiscal year 1991.

[The information follows:]

Preliminary 1991 grants to States

Alabama	$1,166,510
Alaska	337,209
Arizona	464,878
Delaware	338,121
Florida	2,105,841
Georgia	2,451,833
Hawaii	1,039,577
Illinois	3,740,524
Indiana	1,990,746
Iowa	933,859
Kansas	1,124,176
Louisiana	1,334,062
Maryland	935,040
Mississippi	1,046,330
Montana	217,367
New Mexico	358,477
North Carolina	2,645,551
Ohio	4,061,507
Oklahoma	1,672,845
South Carolina	972,467
South Dakota	361,293
Texas	4,133,752
Utah	609,367
Vermont	292,397
Virginia	1,285,549
West Virginia	592,051
Wisconsin	2,085,386
Wyoming	225,285
Total	38,522,000

NEW TRAINING CENTER

Mr. **Whitten**. We know that in fiscal year 1989 you dedicated the Donald L. Houston Training Center for Meat and Poultry Inspection Scientists. Is the Center operating at full capacity? What was the total cost of transferring activities to this Center?

Dr. **Crawford**. The new training center was dedicated and began operating on April 1, 1989. During fiscal year 1990, approximately 1,900 employees are expected to be trained which is near the current capacity for the center. Approximately $400,000 was spent to transfer employees and equipment, and meet travel expenses of agency employees in establishing this center.

Mr. **Whitten**. What were the annual operating costs of the Center, and how many people do you anticipate training during each fiscal year through this Center?

Dr. **Crawford**. The contract with Texas A&M University for fiscal year 1990 totals approximately $2.7 million. The Agency has a small staff at Texas A&M with an annual cost of $0.4 million, bringing the total cost to $3.1 million. During 1990, we expect to train approximately 1,900 employees at the center. The number trained in 1991 should be near this same number of 1,900, subject to fund availability.

HEMORRHAGIC E. COLI

Mr. WHITTEN. We know that the FSIS, in conjunction with the Food and Drug Administration and the Centers for Disease Control, developed a policy for controlling the food borne disease potential from hemorrhagic Escherichia coli. Have there been any reported cases of hemorrhagic Escherichia coli in the past year, and what procedures does FSIS have in place to watch for this disease?

Dr. CRAWFORD. Meat and poultry has not been incriminated in outbreaks of hemorrhagic Escherichia coli during the past year. One large outbreak of approximately 250 illnesses did occur in January 1990. This outbreak occurred in the town of Cabool, Missouri, with some cases in nearby towns. Approximately 10% of the population of Cabool became ill and in the early judgments of the cause, raw milk, undercooked beef or undercooked poultry were prime suspects. The bacterium was never isolated from any of the food or beverage samples tested. At this time, the CDC has tentatively concluded the cause to be the town's water supply.

We have increased the numbers of monitoring samples that we test for this bacterium. On December 20, 1989, we issued a substantially improved method for detecting the bacterium, and the Agency has prepared a regulation to substantially improve handling and heating requirements for cooked beef patties.

THIRD GENERATION POULTRY INSPECTION

Mr. WHITTEN. Last year you reported that there were no plants currently using the Third Generation Refined Poultry Inspection System—TGI, but you had a basic model for TGI that could be used. Are there currently any plants in the U.S. using the TGI system?

Dr. CRAWFORD. No U.S. plants are now using the system.

ENFORCEMENT ACTIVITY

Mr. WHITTEN. Please provide a ten-year table on the Food Safety and Inspection Service Program Enforcement Activities.

[The information follows:]

FSIS ENFORCEMENT ACTIVITIES

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Cases received	566	502	592	674	568	1,065	1,154	959	1,139	1,180
Cases filed with Hearing Clerk	7	5	10	12	6	11	10	5	10	10
Prosecutions	33	51	33	34	21	41	33	33	34	29
Civil Injunctions	7	7	5	2	3	2	1	3	1	2
Seizures	4	2	4	4	3	5	1	4	0	4
Warning Letters	579	680	845	1,012	777	1,673	1,605	1,341	1,533	1,704
Administrative Orders	3	5	11	10	8	8	12	8	13	5
Detentions	708	696	651	748	850	1,209	992	785	1,019	1,126
Million Pounds Detained	NA	6.8	6.8	7.0	5.9	9.1	22.6	12.5	11.5	8.2
Recalls Monitored	7	6	9	14	12	13	18	43	17	17
Planned Reviews	NA	10,273	9,516	8,336	8,782	10,016	10,654	10,349	9,887	10,123
Random Reviews	NA	33,930	30,439	31,573	27,879	41,944	42,464	32,617	46,351	50,243
Total Reviews	41,715	44,203	39,955	39,909	36,661	51,957	53,118	42,966	56,238	60,366

TREND IN RED MEAT AND POULTRY SLAUGHTER INSPECTION

Mr. WHITTEN. Please provide a five-year table showing a breakdown of slaughter inspection between red meat and poultry in terms of both cost and pounds inspected.

[The information follows:]

COST AND VOLUME OF SLAUGHTER INSPECTION

Fiscal year	Red meat		Poultry	
	Cost	Volume	Cost	Volume
1985	$110,002	36,193	$99,749	22,980
1986	105,504	37,042	97,164	24,273
1987	110,356	36,300	101,134	25,700
1988	115,792	36,885	108,989	28,213
1989	121,076	37,400	115,454	30,268

Note —Dollars in thousands. Volume in billions of pounds.

NEW SWAB TESTS

Mr. WHITTEN. Please describe for us any recent developments FSIS has had concerning quick test swab methods used for residue and microbiological contaminations.

Dr. CRAWFORD. No new swab type tests have been initiated in operating plants for several years. However, we are developing a new swab type test which we believe will be appropriate for calves, cows or other animal species. This test has a dye added that makes reading easier and allows the test to be read within 5 hours on the same day as tested.

LOSSES DUE TO CONDEMNED AND RECALLED PRODUCTS

Mr. WHITTEN. Please provide an estimate of the current annual losses due to condemned products and recalled products by FSIS.

Dr. CRAWFORD. For fiscal year 1989, approximately 904,000 pounds of recalled product were returned for condemnation or reprocessing. We cannot place a dollar value on these recalls as they consist of many different products in different states of processing. Some of the recalled product was destroyed while other product was reprocessed and re-offered for sale. I will provide a table listing carcass condemnations in 1989.

[The information follows:]

CARCASSES CONDEMNED AT SLAUGHTER

	Condemned	Percent condemned
Cattle	200,330	0.64
Calves	38,104	1.75
Swine	387,394	.47
Goats	1,462	.64
Sheep	24,971	.50
Equines	1,280	.37
Total, red meat	653,541	.54
Young chickens	59,332,052	1.09

CARCASSES CONDEMNED AT SLAUGHTER—Continued

	Condemned	Percent condemned
Mature chickens	7,377,183	.40
Fryer turkeys	58,643	1.04
Young turkeys	2,879,439	1.20
Mature turkeys	64,959	3.33
Ducks	282,096	1.27
Other	30,043	1.00
Total, poultry	70,024,415	1.19

TREND IN SWINE SULFA VIOLATIONS

Mr. **WHITTEN**. Last year, Dr. Crawford, you testified that the Sulfa-on-Site Program was being used as testing procedures for sulfa drugs in hogs, and that since the use of this program violations among sampled hogs had fallen by half. Has that trend leveled off, and what kind of violations are you finding now?

Dr. **CRAWFORD**. Preliminary data to date suggest that a downward trend is continuing but it is premature to make a definitive statement about these data for 1989. The sulfa-on-site chart, which I will provide for the record, represents results from 100 of the largest swine slaughterers in the United States. The National Residue Monitoring Program Chart reflects data from a statistically designed program representing all slaughterers for the classes of swine indicated.

[The information follows:]

SULFA-ON-SITE

	1988	1989	1990 to date	Total
Tests	85,720	116,726	18,140	220,586
SOS=0	81,540	113,404	17,683	212,627
SOS=1	2,716	2,172	257	5,145
SOS=2	797	607	95	1,499
SOS=3	667	543	105	1,315
Laboratory results:				
Analyses	1,398	1,091	133	2,622
Confirmed violations	385	318	32	735

SOS=0: No sulfamethazine detected in urine.
SOS=1: Less than 0.4 ppm sulfamethazine estimated in urine.
SOS=2: 0.4 to 1.3 ppm sulfamethazine estimated in urine.
SOS=3: Greater than 1.3 ppm sulfamethazine estimated in urine.
Confirmed violations: Greater than 0.1 ppm sulfamethazine in muscle.

NATIONAL RESIDUE MONITORING PROGRAM

	1985	1986	1987	1988	1989	1990 to date
Market hogs:						
Tests	1,135	957	1,295	1,265	3,242	241
Violations	60	37	47	18	32	0
Percent violative	5.3	3.9	3.6	1.4	1.0	0

NATIONAL RESIDUE MONITORING PROGRAM—Continued

	1985	1986	1987	1988	1989	1990 to date
Boars, stags, and sows:						
Tests	270	566	590	668	613	32
Violations	14	26	26	13	11	0
Percent violative	5.2	4.6	4.4	2.0	1.8	0

Note.—A violation is greater than .1 ppm sulfamethazine in liver.

STATUS OF MICROBIOLOGICAL ADVISORY COMMITTEE WORK

Mr. **Whitten**. Please provide us a status report of the National Advisory Committee on Microbiological Criteria for Foods.

Dr. **Crawford**. I will be happy to supply the Committee with a report.

[The information follows:]

After nearly 2 years of deliberations, The National Advsory Committee on Microbiological Criteria for Foods, adopted in January 1990, "Recommendations for Cooked Ready-to-Eat Shrimp and Cooked Ready-to-Eat Crabmeat" and "Recommendations for Refrigerated Foods Containing Cooked, Uncured Meat or Poultry Products that are Packaged for Extended Refrigerated Shelf Life and That are Ready-to-Eat or Prepared with Little or no Additional Heat Treatment." These recommendations were forwarded to the Departments of Agriculture, Health and Human Services, Commerce, and Defense on March 8, 1990.

In November 1989, the Committee completed its review of Hazard Analysis and Critical Control Point Systems (HACCP). A report embodying its recommendations on HACCP application in food processing environments was adopted. Further, Committee recommendations addressing education, labeling and research priorities were forwarded to the sponsoring agencies during 1989.

The Committee recently formed a *Listeria monocytogenes* Subcommittee to review available literature and make appropriate recommendations. This Subcommittee will focus on surveillance, reducing contamination, clarification of "infectious dose", mechanisms of pathogenicity, and prevention guidelines.

The Committee is now in the process of renewal, making reappointments, and reviewing nominations for new members.

A June meeting is scheduled for the full Committee to address future priorities.

TRENDS IN POULTRY INSPECTION

Mr. **Whitten**. Please provide a table showing a ten-year history of the number of birds inspected each year.

[The information follows:]

POULTRY CARCASSES INSPECTED PER FISCAL YEAR

[In millions]

	Young chickens	Mature chickens	Turkeys	Ducks	Other
1980	3,930.8	204.4	159.2	16.9	1.6
1981	4,058.3	205.4	163.9	17.9	1.4
1982	4,079.2	196.1	161.2	19.4	1.0
1983	4,155.9	190.4	165.6	20.6	1.1
1984	4,202.1	173.1	162.7	19.9	1.3
1985	4,426.8	189.0	172.0	21.4	1.1
1986	4,592.6	186.6	191.6	22.7	1.2
1987	4,927.5	193.1	223.1	23.1	1.6
1988	5,149.0	197.2	237.4	24.1	3.4

POULTRY CARCASSES INSPECTED PER FISCAL YEAR—Continued

[In millions]

	Young chickens	Mature chickens	Turkeys	Ducks	Other
1989	5,422.2	183.9	243.6	22.2	3.0

SALMONELLA AND POULTRY REPROCESSING

Mr. WHITTEN. Last year, Dr. Crawford, you discussed a preliminary study taking place in Athens, Georgia concerning Salmonella on poultry. What are the final results of that study?

Dr. CRAWFORD. The Agricultrue Research Service condcuted an eight month poultry reprocessing study to determine if there was a bacterial difference between carcasses regularly processed and those reprocessed by washing or a combination of washing and trimming. The data indicated that reprocessed carcasses had somewhat lower bacterial levels and that proper rewashing techniques effectively removed visible contamination.

The aerobic plate counts which measured total bacteria in the rinse samples were found to be about one-third less on the reprocesed birds compared to the regularly processed birds. Although Salmonella bacteria were not counted, we did not find a statistical difference between the incidence of Salmonella in the reprocessed versus regularly processed birds.

LABELING RECOMMENDATIONS FROM THE MICROBIOLOGICAL ADVISORY COMMITTEE

Mr. WHITTEN. We see in the notes that the National Advisory Committee on Microbiological Criteria for Foods submitted recommendations to the Secretaries of Agricultrue and Health and Human Services on labeling for sensitive products. Could you please provide the Committee a copy of the recommendations.

Dr. CRAWFORD. I will submit a copy of the Committee's recommendations as they were stated in a letter addressed to the Secretaries.

[The information follows:]

The National Advisory Committee on Microbiological Criteria for Foods strongly recommends that the U.S. Departments of Agriculture and Health and Human Services get together and agree on a uniform standardized label statement and logo system for all packaged foods that pose a safety hazard when subjected to temperature abuse.

After much deliberation, we suggest the following for your consideration:

Important

"Must Be Kept Refrigerated"

(For packaged foods that pose a safety hazard when subjected to temperature abuse.)

"Keep Frozen"

(For packaged foods designed to be frozen foods.)

"Refrigerate After Opening"

(For any preserved, packaged foods that will spoil after opening when subjected to temperature abuse.)

These statements should be accompanied by a uniform standardized logo.

The public is often unable to distinguish the difference and impact on their safety from food labeling presently in the market. Recent cases of botulism that tragically occurred from an unrefrigerated garlic produce illustrate the need for public awareness, a uniform logo and clear standardized statements for public health protection and food safety. The Committee transmits this recommendation to you immediately for we all strongly support any public health benefit that can be achieved by heightened awareness of potential food hazards. We offer our services in any way possible to assist or interface with your Departments in this manner.

RECALLS FOR LISTERIA CONTAMINATION

Mr. **WHITTEN**. In May of last year, FSIS announced a revised policy for listeria testing in control of ready-to-eat meat and poultry products. Under the new policy, has FSIS recalled any products?

Dr. **CRAWFORD**. Since the revision of the Listeria testing policy in May, 1989, a total of 16,261 pounds of ready-to-eat meat and poultry products were recalled because of Listeria contamination. This consisted of 2,220 pounds of ham salad, 3,912 pounds of beef patty crumble, 5,221 pounds of pork product, 4,673 pounds of chicken salad, 222 pounds of luncheon meat and 13 pounds of portuguese sausage.

HORMONE-FREE MEAT EXPORTS TO THE EC

Mr. **WHITTEN**. We are all aware of the trade dispute between the European Community—EC—and the United States on the EC ban on imports of hormone-treated beef. In work related to the trade dispute, the Department of Agriculture worked out an agreement with the European Community that allows U.S. producers who wish to export meat not treated with hormones to enter into commercial agreement with the EC itself. Do you have any information you can provide the Committee on how many producers have participated in this program to date?

Dr. **CRAWFORD**. The U.S.-EC Task Force on Hormone did reach agreement on an interim measure which permitted producers of non-treated beef to gain approval of their premises from the EC. Animals from these approved premises could then be slaughtered in EC-approved slaughterhouses and shipped to the various Member States. Our records show there are currently about 345 EC-approved premises. However, only five establishments slaughtered and shipped products of this type in 1989. We do not have records about how many producers actually participated. 1989 data on the five exporters is summarized below.

[The information follows:]

PLANTS TRADING WITH EC NATIONS

Plant name and Est. No.	Product	Destination	Total (pounds)
Est. 7A: Berliner & Marx	Veal	France	23,752.6
Est. 2444: Strauss	Veal	Netherlands	120,465.8
Est. 2508: The Bruss Co.	Beef	Denmark, Federal Republic of Germany.	197,342.8

PLANTS TRADING WITH EC NATIONS—Continued

Plant name and Est. No.	Product	Destination	Total (pounds)
Est. 7164: Cox Packing Co	Beef	Federal Republic of Germany, United Kingdom	100,005.5
Est. 8984: Provimi Veal Co	Veal	Netherlands	377,847.3
Total			819,414.0

INDEMNIFICATION FOR RESIDUE RECALL

Mr. **Whitten**. Last year there was an incidence of heptachlor contamination and 400,000 chickens and two million pounds of fresh and processed products were voluntarily destroyed. In a case like that, is there any indemnification from USDA back to the producer or processor?

Dr. **Crawford**. No. USDA has no legal authority to indemnify producers or processors for unwholesome product condemned and destroyed.

TRICHINOSIS

Mr. **Whitten**. Over the years, the cases of trichinosis have fallen off significantly from earlier times. Do you have any information on how many cases of trichinosis there have been in the past five years?

Dr. **Crawford**. I will be happy to give you that information for the record.

[The information follows:]

SUMMARY OF TRICHINOSIS REPORTED IN THE UNITED STATES

Year	Cases reported	Pork-related	Not pork-related	Unknown meat
1985	46	21	22	3
1986	51	26	17	8
1987 [1]	25	14	5	6
1988 [1]	(44)	(8)	(27)	(9)
1989 [1]	(23)	(6)	(9)	(8)

[1] Values for indicated years represent unpublished or preliminary data.

Mr. **Whitten**. Mr. Smith?

FISH INSPECTION

Mr. **Smith**. Mr. Crawford, have you taken or has the department taken a position yet on fish inspection?

Dr. **Crawford**. The department has been asked to testify, as you know, before several committees on fish inspection. There is at this time no Administration position on fish inspection. We have, however, talked about the need for it and how we think it ought to be done.

This has led to some comments about whether or not it ought to be placed in the Department of Commerce, the Department of Health and Human Services, or USDA.

To answer your question, there is no position at this time.

Mr. **Smith**. No position within the department or within the Administration?

Dr. **Crawford**. Within either.

Mr. **Smith**. Well, you described the situation all right. The poultry and meat inspection bills that were enacted in 1967-1968 placed expanded inspection responsibility on USDA because it was felt that FDA is just not the kind of agency that ought to be operating a continuous inspection program of magnitude. They are a sampling agency. They have a lot of responsibilities, too many responsibilities to operate a full continuous inspection service. So I don't think they ought to be relied upon to have a full inspection service for seafood products.

The question then comes on who should have that responsibility. I am not quite sure Agriculture should either. But I don't know. The Commerce Department is proceeding to make its voluntary program mandatory; but essentially it is a marketing rather than consumer protection program. I'm not sure that a mandatory program would be much more than that.

There is also the question of whether a seafood inspection program should be a continuous program as is the case for poultry and meat where we have bird by bird and carcass by carcass inspection for wholesomeness. Some say it is impractical. I don't know if it is or not. It is a different kind of product. But the fear is—and it is just a fear, that the Administration has in some way or the other figured that if we can just get fish inspection that isn't continuous, fish by fish, we will use that as an excuse not to have bird by bird inspection and animal by animal inspection for poultry and meat. Is there any justification for that fear?

Dr. **Crawford**. No, sir. I have had no conversations in that regard at all.

PRODUCT WHOLESOMENESS

Mr. **Smith**. Let me follow that up with this. I want to ask you to comment on this. In my judgment, the last Administration made a conscious decision that they wanted to eliminate the wholesome requirement in meat and poultry reinspection. They just wanted to work on hazards, period.

This is a new Administration. I have been assured they were going to take a new look at this. You acknowledged in your statement that wholesomeness is part of the act. Can you assure this Committee that the new Administration will inspect meat and poultry for wholesomeness in addition to health hazards and microbiological problems?

Dr. **Crawford**. I can only speak to aspects of our agency.

With respect to our inspection programs, we are going forward with redesigning them along these hazard analysis, critical control point lines which essentially examine each and every aspect of the production of the food, whether it be slaughtered animals or processed products.

Mr. **Smith**. That concentrates on microbiological problems; doesn't it?

Dr. **Crawford**. It concentrates on microbiological problems and chemical residue for the most part.

Mr. **SMITH.** That is okay. That is fine. As long as you don't use that as an excuse for where you don't watch wholesomeness. Is this involved?

Dr. **CRAWFORD.** We are not intending to use it as an excuse. I can tell you that personally and also as administrator.

Mr. **SMITH.** I am glad to hear that. I felt in the last Administration that most of the studies they did and most of the trials that they ran on new inspection programs were for the purpose of trying to justify concentration only on the microbiological aspects and not on wholesomeness at all.

As a matter of fact, the contract that was let with the National Academy of Sciences even limited what they could study to the extent they had to come out with that kind of a result. That didn't help the National Academy of Sciences' credibility as an organization.

FOOD LABELING POLICY

I noticed you have a couple of other studies under way with the National Academy of Sciences. One of those is on food labeling.

Why did you pick them for a food labeling contract?

Dr. **CRAWFORD.** I will tell you how that evolved.

In 1988, the Surgeon General put out his report on diet and health. The group working on that in August 1988 wondered if something might be done in order to consider labeling policies between FDA and FSIS since, in effect, that would cover virtually all the food in the government. At the time of the unveiling of that long-awaited document, the Surgeon had gotten concurrence from USDA and HHS that there would be a study of labeling and what ought to be the ideal label, what sort of nutritional information goes on it and how it ought to be harmonized between HHS and the USDA.

We set up a working group to decide what the work plan should be between the two departments; and then we considered various organizations to do the study; and by process of elimination, we came up with the National Academy of Sciences.

Now let me—may I say just one other thing about that?

Mr. **SMITH.** Yes.

Dr. **CRAWFORD.** They did empanel an outside group of experts. There are 25 of them to look at this. They are headed by the Dean of the University of Virginia Law School who used to be the General Counsel at FDA. I am very satisfied with their experience level and also their commitment to this task.

Mr. **SMITH.** Is this a voluminous contract or just a few pages?

Dr. **CRAWFORD.** It is quite long, but the summary of it is very brief, indeed. It is only four pages.

Mr. **SMITH.** I would like to see the whole contract. You don't need to put it in the record. I would like to have a copy of it to study.

Dr. **CRAWFORD.** You will have it.

STREAMLINED INSPECTION

Mr. **SMITH.** With regard to the streamlined inspection service system for poultry, in Puerto Rico, is there an unpublished study on that?

Dr. **CRAWFORD.** No, sir. There is nothing published at this point.

Mr. SMITH. Is there an unpublished study?

Dr. CRAWFORD. No.

Mr. SMITH. There isn't?

CONTAMINATION

Dr. CRAWFORD. No. There is no unpublished study. I can tell you where we are on that, if you would like.

We started out, as you know, trying to figure out how we could use that poultry plant down there as a laboratory to find out the life cycle of these organisms that infect poultry like Campylobacter, Listeria, and salmonella and some of those.

We found, as I guess you would expect, that you can't handle all of it in the poultry plant itself. It comes in there obviously from the outside.

So we are right now in the middle of a life cycle study where we are looking at contamination that is caused from the feed; also contamination that is picked up in the broiler house, particularly at the time of the collection of the birds when they go to slaughter; contamination that occurs in the crate in which the animal is conveyed; and also cross contamination that occurs in the plant and what happens to the product after it leaves. It is a complete life cycle study.

I can provide one other thing for your information, if you like; that is, North Carolina State University has done a similar study which is now completed and it mirrors to a large extent what we are doing, with one exception. That is, we are now testing a feed additive that is approved in the United Kingdom, but not approved in the United States, which has promise of eliminating salmonella in the feed; and basically blocking it in its life cycle so it does not go ahead and contaminate the chicken.

RESEARCH ON CONTAMINATION

Mr. SMITH. You still have it in the litter and other places like that?

Dr. CRAWFORD. You do, right.

Mr. SMITH. Well, so the gist of it is that it would be virtually impossible to eliminate salmonella altogether in the birds that are coming into the plant?

Dr. CRAWFORD. Well, to this point it is. The science isn't there for that. But these studies really do hold a lot of promise of breaking its life cycle like we are able to do now for coccidia and some of these other organisms.

Mr. SMITH. You vaccinate for that?

Dr. CRAWFORD. There is a vaccine for coccidia and also low levels of feed additives that are added to the feed somewhat similar to the one we are going to be able to use hopefully in the feed for salmonella. If it works in the feed, then over time the contamination that occurs in the litter and elsewhere would be cleaned up.

Mr. SMITH. Completely?

Dr. CRAWFORD. Yes. It is the expectation that there is that possibility. Now, we do not have the science yet to do that; but there is a good possibility.

Mr. SMITH. So, as of now and the foreseeable future, you are not going to be able to eliminate salmonella coming into the plant completely? But you can keep it from increasing when the birds are put out? You dunk it in that fecal tank at the end of the line and they have a lot more salmonella contamination than they had going into the chill tank.

I understand there is another unpublished study that shows where 58 percent have salmonella at the beginning of the line, they had 100 percent contamination in some cases when it came off; is that right?

Dr. CRAWFORD. There is a published study now?

Mr. SMITH. Is that published?

Dr. CRAWFORD. It is published. It does not show the 100 percent.

Mr. SMITH. What is the percent?

Dr. CRAWFORD. The study takes a certain point on the line and analyzes the birds at that point actually before they are washed further and also before going into the chill tank and the chlorinated water. The level is about 58 percent at that point.

Mr. SMITH. All right.

Dr. CRAWFORD. We would expect it would be lower.

Mr. SMITH. What is it after it has been through?

Dr. CRAWFORD. They didn't do that study.

Mr. SMITH. They didn't?

Dr. CRAWFORD. No. As you know, the last time we did a study of that type in the finished product, it was about 37 percent had at least one salmonella organism on the carcass.

The North Carolina State study, just completed, shows this down to 21 percent having one or more.

Mr. SMITH. I understand it showed a 100 percent after it came out of the fecal tank.

Dr. CRAWFORD. No. That study wasn't done.

Mr. SMITH. This is another study, not the one I am referring to. There is another one. This came from you, another study that showed no significant differences in the quality between reprocessed birds and others, so-called reprocessed birds.

Dr. CRAWFORD. That is correct.

Mr. SMITH. That wouldn't be a reduction then; it would be the same level?

Dr. CRAWFORD. Same as. We can make that study available to you. It has now been published.

Mr. SMITH. You don't have this other study that shows that? You didn't even do a study to show what it was after the bird left the chill tank?

Dr. CRAWFORD. The last time we did that study it was 37 percent. We haven't done a study since then. We are commencing a study at the present time.

SALMONELLA RESEARCH

Mr. SMITH. If you are going to study to see what percentage had salmonella at that point in the line just before the chill tank, why would you not also study it after the last point in the line?

Dr. CRAWFORD. The study was done by the Agriculture Research Service. Specifically what they were asked to do is to check it at the particular point on line where reprocessing took place in the test reprocessing. They did not do the end of the line study.

Mr. **Smith**. It seems to me that is an incomplete study, unless you do the rest of the line.

Dr. **Crawford**. The notion was that those kinds of studies have been done. One showing 37 percent and the recent one that shows 21 percent.

Mr. **Smith**. Well, the gist of it is this, really: Unless we have some legalization or some rules under which you have radiation, you are not going to have a 100 percent salmonella-free poultry; is that right?

Dr. **Crawford**. I don't think you will have a 100 percent salmonella-free product in the raw state. After they are cooked, they are all right.

IRRADIATION OF FRESH POULTRY

Mr. **Smith**. Even with irradiation?

Dr. **Crawford**. With radiation, it would work.

As you may know, we have petitioned FDA for approval of irradiation of fresh poultry. We expect that they are going to rule on that very soon now, in the next few days.

Mr. **Smith**. Let me ask my question here. I don't think you understood it.

Unless we have irradiation approved, it will not be possible for people in the near future to go to the grocery store and be able to get poultry that is one 100 percent salmonella free?

Dr. **Crawford**. They are not sterile. They do have bacteria on them. It can include salmonella. That is correct.

Mr. **Smith**. It would be a very small amount. The risk would be greatly reduced?

You would put on the package, so everybody knows what they are buying—I mean, that it has been treated——

Dr. **Crawford**. With irradiation.

Mr. **Smith** [continuing]. With irradiation?

Dr. **Crawford**. Yes. As a matter of fact, there is a symbol that has been given international approval which I am sure you are aware of. You would also say this product has been irradiated.

Mr. **Smith**. Yes.

Well, I have taken more than my length of time, Mr. Chairman.

Mr. **Whitten**. Mr. Skeen?

Mr. **Skeen**. Thank you, Mr. Chairman.

Before we leave the wonderful subject about putting a label on food that shows has been irradiated, I can tell you coming from a state that worries a lot about radiation what that will do for your product.

Let me ask you this. I want to welcome you, Jo Ann and Dr. Crawford, all of you.

HACCP

The food safety issue has always been one of the most interesting parts of the hearings we go through. What I would like to talk to you about is your hazard analyses and critical control points program.

You call it HACCP?

Dr. CRAWFORD. Yes, sir.

Mr. SKEEN. First of all, I want to commend you on initiating those kinds of studies. Risk analysis has been one of the most important aspects of our food industry. We got into the semantics a moment ago about wholesomeness. I don't know how you can define wholesomeness if you didn't have an analysis of what the risks are. It is a good question my colleague asked.

I assume, too, risk analysis is going to have a lot to do with the determination of just what kind of naturally occurring points or problems such as naturally occurring carcinogens, things of that kind? Is this part of the project?

Dr. CRAWFORD. Right. The project will look at chemical residues and the risks they add. I am aware of the fact that all foods contain naturally occurring carcinogens. I am also aware of the school of thought that natural carcinogens are more of a problem than the chemical residues we look for. We will factor that into our planning and plan as much as we can. But there isn't real strong data as to how much risk, say, solanine in a potato poses.

If it is another carcinogen, we will need more information.

Mr. SKEEN. There is a good starting point. I think that is the reason you undertook this kind of analysis. We need it along with other kinds of risk analysis throughout government.

There is no one, including EPA, that does an adequate job of what we call risk analysis.

Let me go back to the inspection process. Should this study help improve the inspection process itself?

Dr. CRAWFORD. Yes. We believe very confidently that it will. It gives us a structure for inspection that is, one, systematized and, two, it is state of the art. You know, all around the world they are adopting these programs and I think it is going to give us a program that we can really be confident in and proud of.

Mr. SKEEN. Do you anticipate this will require fewer or more employees?

Dr. CRAWFORD. At the present time we are projecting it will take about the same number of employees as we currently have on our roles.

Mr. SKEEN. When will this plan be fully implemented?

Dr. CRAWFORD. This study will be completed in two years from its time of inception which started in October of 1989. It will be completed in late summer, early fall of 1991. Then it will be time to project implementation. It could be as early as a year after then, in other words, in 1992.

Mr. SKEEN. How long has this hazardous risk program been in effect?

Dr. CRAWFORD. The first use of the HACCP concept was in designing space food for astronauts. That was in the late 1960s, early 1970s.

The Pillsbury Corporation got a contract from NASA in order to design fail-safe food for astronauts so there would not be food poisoning in outer space. They actually developed this process for that.

About three years later, FDA and FSIS applied the concept to low acid canned goods and it still remains as the inspection program for those kinds of products.

Then gradually, it has received interest, not only here but abroad in other foods and inspection systems.

CONSUMER EDUCATION

Mr. **Skeen**. I think a lot of the discussion today bears on this next question, that is, the public confidence in your programs. How fully do you plan to do a public education program and build confidence in this area? Are you putting money into that process in your budget?

Dr. **Crawford**. We are.

Mr. **Skeen**. Consumer education?

Dr. **Crawford**. Yes, consumer education. We are using our staff and resources for this process.

The two-year planning program we are in now does involve interactive sessions with the consumer movement, consumers of all types, the industry and also scientific organizations, and others.

Mr. **Skeen**. This includes the consumer watch dog organizations? I would hope so.

Dr. **Crawford**. It does, yes.

INFORMATION AND EDUCATION PROGRAMS

Mr. **Skeen**. How much of the current budget for FSIS is marked for public information and consumer education programs?

Dr. **Crawford**. The fiscal year 1990 budget for public affairs is about $2.5 million. This budget includes printing and design costs for brochures, publications, and exhibits; media services; film and video productions; USDA Meat Poultry Hotline expenses; employee communications; limited travel; supplies and subscriptions, as well as staff costs for FSIS employees.

Mr. **Skeen**. How much of the fiscal year 1991 budget for FSIS is marked for public information and consumer education programs?

Dr. **Crawford**. Obligations will continue at about the 1990 levels, adjusted for inflation and federal pay raises—about $2.6 million.

Mr. **Skeen**. Does the fiscal year 1990 budget request include funds for any new information and education programs, or to increase funds for ongoing programs?

Dr. **Crawford**. There are no increases requested for public information and consumer education programs in fiscal 1991. We will continue developing new consumer education programs within current funding levels.

Mr. **Skeen**. Did you receive full funding in the fiscal year 1991 budget for all the public information and consumer education programs that FSIS would like to provide?

Dr. **Crawford**. Yes, we have not planned any expansion of our activities in this area in fiscal year 1991.

Mr. **Skeen**. If not, what are the programs that are not funded under this budget and what is the funding shortfall?

Dr. **Crawford**. A shortfall could only occur as a result of special information efforts required in response to an emergency. Of course, if there is another sequestration in 1991 under Gramm-

Rudman-Hollings or a directed absorption of an employee pay raise, we will have to restrict our public information program as well as other agency activities.

Mr. **Skeen**. Please provide for the record a list of all public information and consumer education programs that are currently funded by FSIS, and the level of funding for each program. Please indicate if the funding levels for these programs is adequate to provide current level of services.

Dr. **Crawford**. I will supply that information for the record.

[The information follows:]

The Agency provides a variety of public information and consumer education materials and programs. Our objectives are two-fold: 1) Encourage a better understanding of USDA's role in protecting public health and ensure confidence in the safety of the meat and poultry supply; and 2) Broaden the scope of campaigns teaching safe food handling practices to new audiences by using HACCP principles to target food handling practices that present the greatest risk of foodborne illness.

To achieve these goals, FSIS conducts the following programs:

Meat and Poultry Hotline: $400,000 (including salaries).

Twelve food safety specialists, who are home economists and dietitians, staff the Hotline Monday through Friday from 10 a.m. to 4 p.m. EST. Hotline staff expect to receive 80,000 calls in 1990 that relate to food handling and safety concerns.

Food News for Consumers magazine: $41,000.

Food News for Consumers is a quarterly magazine that provides food handling and safety information to consumers. It is mailed to 13,000 food editors, extension agents, food and consumers groups, and other.

Food Safety for Those at Risk from Foodborne Illness Campaign: $50,000.

FSIS will launch the At Risk campaign in April with an exhibit and materials during National Consumers Week. The At Risk campaign targets food safety and handling information to consumers at greatest risk of foodborne illness. These consumers include the elderly, pregnant women, young children, and individuals with chronic disease. The budget provides for an exhibit, participation in select conferences, video news release, and educational materials.

Food Safety is No Mystery: $5,000.

The Agency expanded the "Food Safety is No Mystery" program, training program for institutional food workers, to provide a Spanish-language videotape and materials.

General Consumer Education Materials:

Labels Wrap It Up (reprint): $4,000.

Safe Food Book: $16,000.

How Much Do You Know About Safe Food Handling Brochure: $50,000.

Margin of Safety (reprint): $1,000.

General Information on Food Safety, Meat and Poultry Inspection:

HACCP Video (employees, others); $80,000.

FSIS Communicator (employee newsletter): $9,000.

FSIS Food Safety Review newsletter: $4,500.

Residue protection factsheet: $8,500.

What FSIS Does: $35,000.

Press releases, recalls, announcements: $10,000.

These funds are allocated to targeted programs and materials that will be most effective in reaching the public. Materials are provided to extension agents and "information multipliers" who distribute food safety information to additional audiences.

While this approach helps FSIS distribute valuable food safety information and materials, the Agency still relies on traditional distribution of consumer publications from the Washington and regional offices.

FSIS and FDA recently conducted a pilot test of a Food Safety Hotline which would provide a single source for information on the proper handling and preparation of all foods. This pilot has been discontinued as FDA was unable to continue financing its share. FSIS believes this is a useful public service which the Agency would like to continue. If participation of other federal agencies can be secured, FSIS will have to provide additional funding for its share of the first year costs and for annual costs of operation thereafter.

VERIFIED RESIDUE CONTROL PROGRAM

Mr. SKEEN. I understand that FSIS has yet to promulgate final regulations on its Verified Residue Control—VRP—program. When do you expect final regulations to be issued?

Dr. CRAWFORD. The Agency is currently responding to questions raised by OMB on the proposed regulation. We are not able to predict when the proposed regulation will be issued, but we are hopeful publication will occur this year.

Mr. SKEEN. How do you think VRP regulations will affect the Beef Quality Assurance Programs that many industry groups have implemented during the past few years?

Dr. CRAWFORD. The Beef Quality Assurance Programs outline the basic points necessary for residue control. These include steps in monitoring feed sources and feed additives, animal medications, maintenance of records, and joint Agency and industry actions should a residue violation occur. The Beef Quality Assurance Programs define procedures to be used by the feed yard and allow for cooperation between the feed yard and FSIS should any violative residues be detected. The program will provide adequate documentation of the feed and medication history of the cattle in the feed lot. Allowing FSIS access to the records in the event of a violative residue will provide a system for identification of the source of the contamination and, eventually, elimination of the problem.

Mr. SKEEN. Do you foresee the possibility that the two can work together?

Dr. CRAWFORD. Yes, both programs can work together. We have discussed our general plans for residue control at the production level with the Quality Assurance Committees representing the National Cattleman's Association and the National Pork Producers Council. Both the VRP and the BQA programs accomplish the goal of preventing the occurrence of chemical residues on the farm. Each program addresses residue control by settling up control measures with the goal of effectively preventing the occurrence of chemical residues on the farm before they occur in meat.

Mr. SKEEN. Do you think there will be many differences between VRP regulations when implemented and the Beef Quality Assurance Programs that are currently in use? If yes, what do you think those differences will be?

Dr. CRAWFORD. There will be little differences in VRC and Beef Quality Assurance Programs, since both programs are working toward the common end of decreasing the frequency of residue violations in meat.

Mr. SKEEN. Thank you for the responses. I appreciate your responses. Thank you very much.

Thank you, Mr. Chairman.

BUDGET OUTLOOK

Mr. WHITTEN. Mrs. Smith had a problem in another subcommittee so she needed to cut the discussion short. We are familiar with some of the problems. Everybody demands more and more, yet some of our colleagues won't go along with financing what we already have.

As Chairman of the committee, along with the representatives of various subcommittees, I am in the process of trying to prepare a statement to go to the budget committee. It is my judgment that we just cannot keep going along with the fiscal situation the way it is without some relief on the income side of things. We ask the Federal Reserve Bank for more money. More money with nothing to back it. The country has less and less behind its money.

What is the outlook in your agency so far as keeping up the same amount of inspections? How much supplemental are you going to have to have? How much will you have to cut back? You were asked this but it wasn't followed up closely awhile ago. What is the outlook in the department so far as having to have more money in the current year? What is your outlook on getting by on the money that has already been appropriated?

Dr. CRAWFORD. We believe that the short fall is probably going to mean we are going to have about four days of this fiscal year——

Mr. WHITTEN. I notice you put it in days. You have an agreement on the part of the employees to accept it that way; have you?

Dr. CRAWFORD. No, we do not.

Mr. WHITTEN. Your face is getting a little redder. I reckon it is reflecting the beautiful dress.

Dr. CRAWFORD. The effect of a furlough on our employees is a problem for us.

Mr. SMITH. Will the Chairman yield?

Mr. WHITTEN. Certainly.

Mr. SMITH. I don't see how you can shut down four days. What are you going to do? Hold all the cattle and hogs out there on the farm for four days?

Mr. WHITTEN. I guess we will have to go on a fast.

Dr. CRAWFORD. You will have to put them on a fiscal year basis.

Mr. SKEEN. Do it as snow days, like they do the schools.

Mr. SMITH. You know, when we had the Budget Control Act in the conference, the chairman of this committee and I told them that we have a long list of programs that are exempt. We both told them you cannot possibly operate an inspection service unless it is exempt from Gramm-Rudman. They exempted a dozen other things but not this.

There is no way you can operate without funds is there?

Dr. CRAWFORD. No.

Mr. SMITH. You just have to have it some way or the other?

Dr. CRAWFORD. Yes.

Mr. WHITTEN. It was an easier way for you to say it; wasn't it?

Dr. CRAWFORD. Yes, sir.

Mr. WHITTEN. Now, Mr. Smith is right. Some years ago somebody said we were going to try to get the cows to skip Sundays as far as milking was concerned. It didn't work. That is what some people proposed to us. We are faced with a whole lot of things like that that are just unrealistic.

IMPORT INSPECTION

Provide for the record—and I don't know if we will publish this—countries from whom we import meats and the quality insofar as the records are concerned. I am not asking you to make a survey, just tell us what your records show, what the outcome has been so far as improving what they send us and—I doubt we will publish any of this.

As a former district attorney, I think both sides ought to be shown in fairness. You probably work these things out. I do think the committee would be interested in that.

Dr. CRAWFORD. I will be glad to provide that information for the record.

[CLERK'S NOTE.—The information provided to the Committee will be retained in Committee files.]

It has been a pleasure working with you.

Dr. CRAWFORD. Thank you, Mr. Chairman.

Ms. SMITH. Thank you, Mr. Chairman.

JO ANN SMITH CONFIRMED FOR AGRICULTURE POST

WASHINGTON, May 18—Jo Ann Smith, a Micanopy, Fla., rancher who was the first woman president of the National Cattlemen's Association, today was sworn in as assistant secretary of agriculture for marketing and inspection services. Her nomination was confirmed by the U.S. Senate yesterday; President Bush nominated her for the post March 23.

After swearing her in, Secretary of Agriculture Clayton Yeutter said, "The background and talent which Jo Ann Smith brings to USDA will be vital as we set the stage for the future of American agriculture."

Smith was a partner along with her spouse, Cedrick M. Smith, in Smith Bros. Farming and Ranching and Smith Construction. Prior to her nomination for the USDA post, she chaired the Cattlemen's Beef Promotion and Research Board, responsible for a $75 million annual budget to promote, advertise, research and provide consumer information in the beef industry.

Other recent professional activities include serving as chairman of the Board, Federal Reserve Bank, Jacksonville, Fla.; on the Board of Governors, Chicago Mercantile Board of Trade; on President Reagan's U.S. Advisory Committee for Trade Negotiations; on the Florida governor's task force on the future of Florida agriculture; and in advisory posts to the Florida Department of Agriculture and Consumer Services. Smith also serves on the advisory committee for PRIDE for the development of Florida Prison Industries.

The new U.S. Department of Agriculture assistant secretary's wide-ranging community service includes the Board of Overseers of the University of Florida Health Science Center, chairing the Munroe Regional Medical Center Board of Trustees, the advisory committee of the University of Florida College of Veterinary Medicine, membership in the the Florida Farm Bureau, and serving as president of the Florida 4-H Foundation.

Smith's honors include being named woman of the year in American agriculture in 1988 by Progressive Farmer Magazine; receiving the merit award for distinguished service to agriculture from Gamma Sigma Delta in 1986; and being named woman of the year in Florida agriculture in 1986 by the Florida Department of Agriculture and Consumer Services.

Smith and her husband have two grown children.

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COMMITTEE ON APPROPRIATIONS

FOOD SAFETY AND INSPECTION SERVICE

Statement of Dr. Lester M. Crawford, Administrator, before the House Subcommittee on Rural Development, Agriculture, and Related Agencies.

Mr. Chairman, I appreciate having the opportunity to appear before this subcommittee to discuss the budget of the Food Safety and Inspection Service (FSIS) for Fiscal Year 1991.

The mission of FSIS is to ensure that meat and poultry products are safe, wholesome, and accurately labeled. We carry out this mission every day, in every Federal meat and poultry plant in the country through our professional and dedicated staff of 9,000 full time employees.

Since the inception of the meat and poultry inspection program, FSIS has evolved from a plant inspection operation to one that is today directly concerned with broader aspects of public health. For the last fifteen years, the Agency has been modernizing meat and poultry inspection to focus on hazards to public health, by introducing a succession of program improvements that will assure the American people of a safer supply of meat and poultry products, and, at the same time, provide them with reliable information relative to the nutritional qualities of the food they buy.

Before getting into the specifics of our Fiscal Year 1991 budget request, I would like to give you a brief overview of the scope of the work of FSIS.

The Meat and Poultry Inspection Acts permit Federally inspected meat and poultry plants to sell their products in interstate or foreign commerce. At the end of fiscal year 1989, 6,723 meat and poultry plants received federal inspection. This number consists of 370 slaughter plants, 4,730 processing plants, 1,287 plants with a combination of slaughter and processing operations, and 336 Talmadge-Aiken plants in which State employees perform Federal inspection functions.

During fiscal year 1989, FSIS inspectors examined 121 million red meat animals, approximately 5.9 billion birds, and 155 billion pounds of processed products. In addition, about 2.5 billion pounds of imported meat were approved for entry to the U.S.

Of the red meat animals inspected in fiscal year 1989, approximately 367,000 carcasses, or 0.3 percent, were condemned. For poultry, approximately 70 million birds were condemned, or 1.2 percent of the total number inspected. Carcasses were condemned if they were diseased, contaminated, or otherwise unsafe or unfit for human consumption. Approximately 13 million pounds of imported product was refused entry to the U.S. due to failure to meet Federal requirements.

To provide support for our inspectors in the field, FSIS maintains extensive laboratory capabilities. Three state-of-the-art, in-house, multidisciplinary laboratories, two contract laboratories, and 315 accredited private laboratories provide extensive scientific support to the program in testing products for chemical residues, microbiological contamination, processed product composition, and economic adulteration.

FSIS is committed to basing its regulatory decisions on scientific information. During fiscal year 1989, approximately 551,000 samples of meat and poultry were examined for residues and adulterants. From these samples, 2.5 million separate analyses were performed.

Several "rapid tests" for meat and poultry have been developed by FSIS scientists to be conducted in the plant by inspectors, with the results being available almost immediately. These rapid tests include the Sulfa-On-Site (SOS) test, used to detect the presence of unacceptable levels of the antibiotic sulfamethazine; the Swab Test on Premises (STOP), used to detect the presence of various antibiotics; and the Calf Antibiotic Sulfa Test (CAST), used to detect the presence of antibiotics and sulfa drugs in veal calves. In fiscal year 1989, 125,059 SOS tests were conducted; 69,387 STOP; and 164,026 CAST.

FSIS is committed to protecting public health not only through continual improvements in its inspection techniques, but also through enforcing industry compliance with requirements of the Federal meat and poultry laws. In fiscal year 1989, FSIS detained over 8 million pounds of meat and poultry, and conducted 17 recalls of products involving nearly 6 million pounds. In addition, 29 convictions were obtained for violations by individuals and firms of meat and poultry laws resulting in fines as large as $1 million.

FISCAL YEAR 1991 BUDGET

For fiscal year 1991, FSIS is requesting a total of $440.9 million. This total consists of $257.1 million for slaughter inspection; $108.6 million for processing inspection; $10.9 million for import-export inspection; $25.7 million for laboratory services; and $38.5 million for the Grants to States program. This is an increase of approximately $24 million over the amount appropriated for 1990.

Explanation of Proposed Increases

Of the $24 million increase, $19 million is needed to maintain Federal inspection services at the current level. This increase will provide for the rising cost of Federal contributions to employees' retirement, health insurance, and workman's compensation funds, as well as for the rising cost of goods, services, and employee salaries.

An additional $3 million is requested for inspection staffing in slaughter plants. National production of meat and poultry continues to rise annually, with the largest increases occurring in poultry slaughter. The Federal Meat and Poultry Inspection Acts require inspection of every bird and animal at time of slaughter. FSIS has little flexibility in determining staffing levels, but must provide inspectors to inspect every meat and poultry slaughter line operated by the industry.

An increase of $1.9 million is needed for the Grants to States program to maintain services at the current level. The 1967 Wholesome Meat Act and the 1968 Wholesome Poultry Products Act require State meat and poultry inspection programs to be "at least equal to" the Federal inspection program. If States choose to end their meat and poultry inspection programs or cannot maintain this standard, FSIS must assume responsibility for inspection. Currently, FSIS participates in Federal-State cooperative efforts for inspection of meat and poultry products and provides 50/50 funding to 28 cooperating States.

The total meat and poultry inspection program, which is vital to public health, cost the nation just $1.60 per capita in 1989. While the workload of FSIS has more than doubled since 1974, the budget, measured in constant dollars, has not grown at all. While steadily reducing the unit cost of inspection, FSIS has, at the same time, been improving its effectiveness.

CONTINUING PROGRAM EFFORTS

Hazard Analysis and Critical Control Points

During fiscal year 1989, FSIS committed the Agency to a simple, logical, but highly specialized system for food safety control -- the Hazard Analysis and Critical Control Point (HACCP) system. In general, HACCP involves a prioritization of the potential risks and an increased emphasis on "critical control points." A critical control point is a point in the production process where failure to control the process is likely to result in the manufacture of an unsafe or otherwise violative product.

In meeting the role of a public health agency, the Food Safety and Inspection Service has already incorporated HACCP principles into certain aspects of current inspection operations, and is preparing for the implementation of HACCP in all appropriate meat and poultry inspection activities. In August of 1989, an FSIS task force was created to begin the process for ensuring that the Agency's initiatives, programs and regulations incorporate HACCP principles into all aspects of the program.

HACCP is not a new concept; it is a food protection approach that has come of age. It is a simple, logical, and scientific "systems" approach that has proven itself through 18 years of operation and fine-tuning. It is designed to prevent problems from occurring, rather than to merely "catch" bad product at the end of the production line.

The concept of HACCP is defined by seven principles identified by the National Advisory Committee on Microbiological Criteria for Foods in 1989. These are to:

1. Assess hazards associated with each operational step of growing, harvesting, processing, manufacturing, distributing, marketing, and consumption of raw materials, ingredients and food; and identify prevention measures that can be taken at each step.
2. Determine critical control points (CCPs) required to control the identified hazards.
3. Establish requirements that must be met at each CCP.
4. Establish procedures to monitor each CCP.
5. Establish corrective actions to be taken when there is a deviation identified by monitoring of a CCP.
6. Establish effective record keeping systems that document the HACCP plan.

7. Establish procedures for verification that each HACCP system is working correctly. Verification measures may include biological, physical, chemical, and sensory methods, and, when needed, establishment of necessary criteria.

Our inspection program is as advanced as science and resource availability permit it to be at this time. Our intent is to fully incorporate HACCP into our present program of continuous inspection of meat and poultry products. There are many sources of risk to the consumer from meat and poultry -- bacteria, viruses, natural toxins, parasites, chemical contaminants, decomposition, and mishandling. For the first three -- bacteria, viruses and natural toxins -- several agencies and private concerns are looking for methods to reduce the incidence of these problems. Results have been slow, but progress is being made, and FSIS will continue to implant these new technologies in its current program as they become available and are proven effective and feasible.

The last four risks mentioned -- chemical contaminants, decomposition, parasites, and mishandling -- are all areas in which the current USDA meat and poultry inspection program has had considerable success in limiting possible danger to consumers. These risk areas have been the focus of more frequent on-site inspection.

We believe that further implementation of HACCP will benefit the public, industry and USDA by: focusing inspection activities on the critical areas of product safety, and wholesomeness, and by preventing adulteration; focusing industry responsibilities and actions to produce safe, wholesome and unadulterated food; and strengthening the scientific basis for inspection operations.

The first step in implementation of HACCP is agreement on basic principles. In late October, FSIS released a concept paper defining HACCP as it relates to agency activities. In that paper, we announced our plans to begin a two-year study to determine the optimal process for implementing HACCP in meat and poultry inspection operations. Our second step was to develop a strategy for that two-year study to help us determine the best way to implement HACCP. This strategy paper was distributed in January.

As part of the HACCP study, we will solicit suggestions from FSIS employees, employee and other professional organizations, other regulatory agencies, the public, and the private sector.

We also plan to convene cooperative workshops with industry, which will allow us to draw from their expertise to develop suitable HACCP models. This process will be similar to the work done by the National Marine Fisheries Service in preparing their model HACCP plant. The objectives of the workshops will be to: ensure a mutual understanding of HACCP principles and applications; allow industry and government to work together to develop model HACCP plans for specific products or processes that include all HACCP principles; and, identify regulations and laws that need recasting to accommodate a HACCP regulatory framework.

After the workshops, we will begin testing the models in plants. Eventually, we will conduct a trial implementation of the HACCP model plan using the HACCP system and traditional inspection methods. We will need to look at several categories of products or processes before determining the best overall approach for implementing HACCP in the meat and poultry inspection program.

Factors critical to the success of the HACCP program are the training of FSIS inspectors, the development of cooperative programs with industry, and the growth of consumer education programs. These will ensure that everyone involved in the processing and handling of meat and poultry food products has a thorough understanding of potential dangers and the role of each of them in preserving the wholesomeness of the product.

Labeling Policies

Labeling policies are another priority for FSIS. The Agency reviews labels prior to authorizing their use. Label approval applications must include the product name, formula, method of preparation, type of container, and a description of how the label is to be used. Labeling requirements apply to all meat and poultry products. These include: appropriate product name; ingredients used, listed by weight from most to least; net quantity of the package contents; name and address of the manufacturer, packer, or distributor; the USDA mark of inspection; and any special care or handling instructions, such as "keep refrigerated." In addition, any aspect of labels, including photographs or art work depicting a product, may not be false or misleading.

In 1989, FSIS reviewed almost 138,000 labels to ensure truthfulness and accuracy. As consumer interest in health and nutrition grows, industry has responded to this interest with requests to include on the label or packaging claims about the benefits of its products.

FSIS and the Food and Drug Administration (FDA) share responsibility for ensuring accurate labeling. In 1989, FSIS and FDA contracted with the National

Academy of Sciences for a 12-month study to determine the best labeling policy and the "ideal" label. To determine what information the public wants and needs on labels, FSIS and FDA held public hearings in November and December in Chicago, San Antonio, Seattle, and Atlanta.

Our Agency supports a policy of providing the public with full and accurate information on the composition of foods. To avoid confusion and assure a uniform and coordinated approach to labeling, FSIS will not propose health claims rules until after FDA develops a final rule as a guideline for other Agencies.

International Issues

International issues remain a high priority with FSIS. In the 1985 Farm Bill, Congress amended the federal inspection laws to place additional residue controls on imported meat and poultry. Some of the Farm Bill provisions required changes in regulations, and others are addressed by existing regulations and FSIS activities.

The Farm Bill amendments address three areas. First, imported poultry must come from countries which apply to exported product the same inspection, sanitary, quality, species verification and residue standards as are required of poultry produced in the United States. A comparable amendment to the Federal Meat Inspection Act was part of the 1981 Farm Bill. Second, the Secretary of Agriculture must periodically certify that residue programs operated by countries exporting meat to the United States use reliable analytical techniques to ensure compliance with U.S. residue standards. Third, the Secretary of Agriculture is authorized to set conditions for the importation of live animals for slaughter when they may have been administered an animal drug or antibiotic drug banned in the United States.

With regard to poultry, FSIS has published a final regulation clarifying that imported poultry must meet the same standards as U.S. poultry. Five countries currently export poultry to the United States: Canada, France, Hong Kong, Great Britain, and Israel. Each has implemented residue and species programs that are equal to the U.S. program. FSIS technical experts have reviewed these residue and species programs and have confirmed they are in place and operating effectively. The residue programs include point-of-slaughter random sampling of carcasses, including the internal organs and fat; testing of carcasses for residues of substances used in poultry production or otherwise known to be present in the environment of the country; and the use of approved analytical methods. If needed, FSIS can request additional testing by the country for specific substances.

As a further check on the exporting country's inspection system, FSIS reinspects, on a sample basis, meat and poultry when it enters the United States. Eight types of reinspection can be performed on products at port-of-entry, including random sampling for residues and species verification. Reinspection is directed by the Automated Import Information System. This system stores reinspection results and uses the information to determine the amount of poultry to be examined and the specific reinspection procedures to be applied to each shipment. At port-of-entry reinspection in 1989, FSIS conducted 13,517 residue tests and found 16 violations.

With regard to the requirement for certification of the residue programs of countries exporting meat to the United States, FSIS has procedures in place for annually reviewing and certifying that a country's residue program meets our standards. We require countries to use random sampling techniques and internationally-recognized analytical methods. We also require each country to submit its annual residue plan, including the number of samples and the compounds included; and we require the submission of the country's previous year's residue testing results. FSIS has published a regulatory proposal that codifies the residue program requirements that must be maintained by foreign countries exporting to the United States. This mechanism will provide more extensive information about conditions in a country and will provide FSIS with a better basis for judging the adequacy of a country's residue program.

The regulatory proposal implementing residue certification also would implement the Secretary's authority to prescribe terms and conditions under which cattle, sheep, swine, goats, horses, mules and other equines that have been administered a drug banned for use in the United States, may be imported into the United Sates for slaughter and human consumption.

On another front, last year's dispute with the European Economic Community over the use of hormones has led to a proposal by the U.S. of a model to harmonize international health and sanitary regulations. We define "harmonize" as to make equivalent, but not necessarily identical.

The U.S. proposal calls for international harmonization of animal health and sanitary regulations, plant health and sanitary regulations, and health regulations relating to fresh and processed foods and beverages. The intent is to reduce trade barriers and to ensure that citizens of all nations have access to safe and wholesome food at reasonable cost.

While the U.S. can propose, it cannot implement harmonization on a unilateral basis; it must be done multilaterally. We must work through the international organizations that already exist and which are responsible for the establishment of commodity standards, hygiene codes, and certification methods, and which disseminate regulatory information.

The Codex Alimentarius Commission, usually referred to as Codex, is one such international organization. It is organized under the Food and Agriculture Organization and the World Health Organization. I am very privileged to work with colleagues from 135 countries as the U.S. Coordinator for Codex Activities. Codex determines priorities for food standards. It initiates and finalizes those standards. Then, after acceptance by governments, it publishes them as either regional or worldwide standards. Codex is involved with standards for all principal foods, whether raw, semi-processed, or processed.

While Codex serves an advisory function, the General Agreement on Tariffs and Trade (GATT) has a regulatory function. Under the U.S. proposal for harmonization, the GATT would use internationally agreed-upon standards to settle any disputes between trading partners.

We recognize that harmonization among nations for food safety regulations is a complex undertaking. However, it is a priority for FSIS, and we will continue working through Codex and the GATT to achieve our goals.

Scientific Issues

Scientific advances in controlling residues have greatly benefitted FSIS, industry, and consumers. Often, though, public fears are misdirected. Scientists agree that pesticide residues are not a major public health problem, yet pesticides top the list of consumer fears about food. In contrast, bacteria cause millions of cases of foodborne illness each year, yet many consumers fail to recognize this potential threat.

The greatest risks to public health posed by meat and poultry are from microbiological hazards. Therefore, FSIS continues to place the highest priority on the search for new ways to control microbiological hazards.

An important element in the agency's modernization program is the National Advisory Committee on Microbiological Criteria for Foods, which was mentioned earlier for its role in HACCP. The Committee was divided into subcommittees to allow experts to concentrate on their areas of expertise.

The Meat and Poultry Subcommittee has worked on the development of microbiological criteria for refrigerated ready-to-eat meat and poultry products, and the Seafood Subcommittee on microbiological criteria for cooked ready-to-eat shrimp and crab meat. It was during these meetings that the committee defined the principles of HACCP, and a separate HACCP Subcommittee was established.

In May 1989, FSIS published in the Federal Register a revised monitoring and regulatory policy for control of *Listeria monocytogenes* in ready-to-eat meat and poultry products. The new program began in July.

Highlights of the revised program include increasing sample sizes for monitoring; sampling of intact consumer-size packages and immediate recall of product which tests positive; informing plant management when samples are taken; and, allowing plants to hold product pending receipt of test results.

FSIS, in cooperation with the Agricultural Research Service (ARS), has also been looking closely at the microbial problems that can occur during reprocessing of poultry. In 1989, ARS conducted a study for FSIS comparing the microbial quality of uncontaminated chickens processed on the line with that of birds reprocessed after contamination by intestinal contents. The study showed no significant differences in microbial quality between reprocessed birds and the others.

A long-term study completed in 1989 yielded promising results for improving the microbial quality of raw poultry by suggesting simple changes, such as adding chlorine to the chillers. In November, FSIS began raising four flocks of birds on feed containing organic acids in an effort to decrease the presence of salmonellae in the intestines of birds arriving at the plant. During 1991, the Agency will concentrate on changes at the farm, as well as additional processing changes.

In addition to its microbiological control program FSIS continually monitors for chemical residues as well as for animal drugs and environmental contaminants under our National Residue Program.

The Environmental Protection Agency and the Food and Drug Administration establish the acceptable levels of residues or tolerances for these contaminants in their respective areas of responsibility. Using these tolerances, FSIS has found that less than one percent of all samples show illegal residues.

In 1989, FSIS conducted an intensive surveillance testing program at poultry and swine slaughtering plants in 10 States. The testing was begun after the banned pesticide heptachlor was found in chickens in Arkansas. After four months of operation, only one sample of approximately 3,900 taken was positive for heptachlor.

Public Information and Consumer Education

FSIS continues to place a very high priority on educating consumers and informing the public about our activities, and about the role of consumers in ensuring food safety. Many food safety hazards can be easily controlled by proper food handling.

During 1989, FSIS completed its first food safety education pamphlet targeted to Spanish speaking consumers. The first of its kind to provide basic food safety information in both Spanish and English, the publication is being targeted to recent immigrants in Texas, Florida, New York, and California.

Work has begun on a new food safety brochure for consumers. Based on the HACCP process of identifying steps in food handling that could lead to foodborne illness, the publication will point out the most critical steps consumers can take in preventing foodborne illness at home. This publication is scheduled for release later this year.

Two new public health education campaigns have been recently completed. One campaign is focusing on wellness programs to promote food safety by providing food safety information to consumers who are most at risk for developing foodborne illnesses -- the elderly, pregnant women and young children, and those who are chronically ill.

Food News for Consumers is the FSIS quarterly food safety magazine sent to 1,500 food, health, and science writers, and 13,000 nutritionists, dietitians, public health officials, home economics teachers, and Cooperative Extension Specialists. In 1989, the magazine included articles on emerging pathogens such as the Norwalk virus and hemorrhagic *E. Coli:0157*. Basic food safety information was included in articles on what to do when the power goes out, how to prevent foodborne illness at holiday meals, and proper cooking of eggs to prevent salmonella. In the Winter 1990 issue, the magazine took a more scientific approach to explain "The State of Food Safety." Other topics to be covered this year include safe microwave cooking and handling food safely for groups at risk for foodborne illness.

The Meat and Poultry Hotline is an important tool in the prevention of foodborne illness. Last year, 64,000 people called the hotline for food safety information. It is projected that in 1990, 80,000 people will call. The growing market for convenience foods led to concerns about mail order, precooked, and prepackaged meals and entrees. FSIS is continuing to explore expanding the Meat and Poultry Hotline to a Food Safety Hotline answering questions about all food products.

Performance-Based Inspection System

The Performance Based Inspection System (PBIS) was implemented nationwide in 1989. This system of structured, computerized assignment schedules guides inspectors in determining what to inspect and when to inspect it. PBIS is an independent system, and helps make processing inspection more uniform. It also provides FSIS with its first easily-accessible database on plant performance.

In implementing the system, the Agency has trained more than 3,665 inspectors, supervisors, and managers. FSIS is presently introducing system improvements and refinements, a process that will continue in 1990. The Agency is seeking ways of strengthening this already useful system. We have appointed working groups to examine the PBIS system in terms of information management, enforcement, staffing, and the corrective actions taken when a problem is found.

Mr. Chairman, this concludes my statement. Thank you for the opportunity to testify on the budget needs and priorities of our Agency. I will be glad to answer any questions you or other members of the subcommittee may have.

FOOD SAFETY AND INSPECTION SERVICE

Purpose Statement

The Food Safety and Inspection Service was established on June 17, 1981, by Secretary's Memorandum No. 1000-1 issued pursuant to Reorganization Plan No. 2 of 1953 (7 U.S.C. 2201).

The major objective of the Agency is to ensure that the Nation's commercial supply of meat and poultry products is safe, wholesome, and correctly labeled and packaged, as required by the Federal Meat Inspection Act and the Poultry Products Inspection Act.

The Meat and Poultry Inspection Program of the Food Safety and Inspection Service provides inplant inspection of all domestic establishments preparing meat or poultry products for sale or distribution in commerce; reviews foreign inspection systems and establishments that prepare meat or poultry products for export to the United States; and provides technical and financial assistance to States which maintain meat and poultry inspection programs equal to that of the Federal inspection program.

During 1989, the Agency maintained central offices in the Washington metropolitan area, five regional offices, 26 area offices, and a nationwide network of inspectors in approximately 7,300 establishments (including official import inspection facilities) in 50 States, Puerto Rico, American Samoa, Guam, and the Virgin Islands. Much of the work is conducted in cooperation with Federal, State and municipal agencies, as well as private industry. As of September 30, 1989, the Agency employment totaled 8,942 permanent full-time employees and 810 other employees. Of these, 701 permanent full-time employees and 74 other employees were located in the central offices, and 460 permanent full-time employees and nine other employees were in area and regional offices. The balance of 7,781 permanent full-time employees and 727 other employees were in field locations.

FOOD SAFETY AND INSPECTION SERVICE

Available Funds and Staff-Years

1989 Actual and Estimated, 1990 and 1991

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Food Safety and Inspection Service:						
Salaries and Expenses	$404,954,000	9,121	$416,898,000	9,175	$440,882,000	9,277
Obligations under other USDA appropriations:						
APHIS for blood samples (MPI)	723,666	--	1,000,000	--	1,000,000	--
Total, Agriculture Appropriations	405,677,666	9,121	417,898,000	9,175	441,882,000	9,277
Non-Federal Funds:						
Reimbursements:						
Meat and Poultry Inspection	50,357,958	225	52,000,000	227	54,000,000	227
Trust Funds:						
Meat and Poultry Inspection	1,135,909	21	1,150,000	21	1,200,000	21
Total Non-Federal Funds	51,493,867	246	53,150,000	248	55,200,000	248
Total, Food Safety and Inspection Service	457,171,533	9,367	471,048,000	9,423	497,082,000	9,525

Full-Time Equivalent Staff-Years:	1989 Actual	1990 Estimated	1991 Estimated
Ceiling	9,367	9,423	9,525
Non-ceiling	1,032	1,032	1,032
Total	10,399	10,455	10,557

FOOD SAFETY AND INSPECTION SERVICE
Permanent Positions by Grade and Staff-Year Summary
1989 and Estimated 1990 and 1991

	1989			1990			1991		
	Head-quarters	Field	Total	Head-quarters	Field	Total	Head-quarters	Field	Total
ES-6	1	0	1	1	0	1	1	0	1
ES-5	9	0	9	10	0	10	10	0	10
ES-4	6	2	8	5	3	8	5	3	8
ES-3	0	1	1	1	2	3	1	2	3
ES-2	2	2	4	1	0	1	1	0	1
GS/GM-15	33	11	44	33	11	44	33	11	44
GS/GM-14	95	42	137	95	42	137	95	42	137
GS/GM-13	194	256	450	194	258	452	194	258	452
GS-12	62	859	921	62	865	927	62	865	927
GS-11	60	415	475	60	418	478	60	438	498
GS-10	1	150	151	1	151	152	1	151	152
GS-9	37	2,121	2,158	37	2,135	2,172	37	2,135	2,172
GS-8	6	1,027	1,033	6	1,034	1,040	6	1,034	1,040
GS-7	52	2,770	2,822	52	2,788	2,840	52	2,868	2,920
GS-6	45	56	101	45	56	101	45	56	101
GS-5	66	400	466	66	403	469	68	403	471
GS-4	35	95	130	35	96	131	35	96	131
GS-3	8	19	27	8	19	27	8	19	27
GS-2	1	1	2	1	1	2	1	1	2
Ungraded Positions	4	18	22	4	18	22	4	18	22
Total Permanent Positions	717	8,245	8,962	717	8,300	9,017	719	8,400	9,119
Staff-Years:									
Ceiling	763	8,604	9,367	763	8,660	9,423	765	8,760	9,525
Non-Ceiling	2	1,030	1,032	2	1,030	1,032	2	1,030	1,032
Total	765	9,634	10,399	765	9,690	10,455	767	9,790	10,557

FOOD SAFETY AND INSPECTION SERVICE

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

	1989	1990	1991
Personnel Compensation:			
Headquarters	$25,753,681	$26,515,000	$27,633,000
Field	235,845,669	242,813,000	253,190,000
11 Total Personnel compensation	261,599,350	269,328,000	280,823,000
12 Personnel benefits	55,016,255	59,602,000	67,209,000
13 Benefits for former personnel	1,029,734	1,030,000	1,030,000
Total Personnel Compensation and Benefits	317,645,339	329,960,000	349,062,000
Other Objects:			
21 Travel	19,792,712	19,549,000	20,634,000
22 Transportation of things	1,426,321	1,380,000	1,425,000
23 Communications, utilities and miscellaneous charges	8,144,445	7,907,000	8,167,000
24 Printing and reproduction	1,262,546	1,226,000	1,267,000
25 Other services	15,936,670	16,279,000	17,417,000
26 Supplies and materials	2,480,620	2,409,000	2,605,000
31 Equipment	1,603,538	1,558,000	1,725,000
41 Grants, subsidies and contributions	36,480,000	36,574,000	38,522,000
42 Insurance claims and indemnities	49,238	49,000	51,000
43 Interest and dividends	6,563	7,000	7,000
Total Other Objects	87,182,653	86,938,000	91,820,000
Total Direct Obligations	404,827,992	416,898,000	440,882,000
Position Data:			
Average Salary, ES positions	$76,583	$77,100	$89,800
Average Salary, GM/GS positions	$28,388	$29,400	$30,400
Average Grade, GM/GS positions	8.65	8.65	8.65

FOOD SAFETY AND INSPECTION SERVICE

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Salaries and Expenses:

For necessary expenses to carry on services authorized by the Federal Meat Inspection Act, as amended, and the Poultry Products Inspection Act, as amended, [$422,799,000] $440,882,000: Provided, That this appropriation shall be available for field employment pursuant to section 706(a) of the Organic Act of 1944 (7 U.S.C. 2225), and not to exceed $75,000 shall be available for employment under 5 U.S.C. 3109: Provided further, That this appropriation shall be available pursuant to law (7 U.S.C. 2250) for the alteration and repair of buildings and improvements, but the cost of altering any one building during the fiscal year shall not exceed 10 per centum of the current replacement value of the building.

SALARIES AND EXPENSES

Appropriation Act, 1990	$422,799,000
Budget Estimate, 1991	440,882,000
Increase in Appropriation	+18,083,000

Adjustments in 1990:		
Appropriation Act, 1990	$422,799,000	
Gramm-Rudman-Hollings Reduction (P.L.99-177)	-5,901,000	
Adjusted base for 1990		416,898,000
Budget estimate, 1991		440,882,000
Increase over adjusted 1990		+23,984,000

SUMMARY OF INCREASES AND DECREASES
(On basis of adjusted appropriation)

Item of Change	1990 Estimated	Pay Costs	Program Changes	1991 Estimated
Slaughter Inspection	$242,272,000	+$5,230,000	+$9,613,000	$257,115,000
Processing Inspection	103,142,000	+2,145,000	+3,274,000	108,561,000
Import-Export Inspection	10,481,000	+199,000	+266,000	10,946,000
Laboratory Services	24,429,000	+346,000	+963,000	25,738,000
Grants-to-States	36,574,000	--	+1,948,000	38,522,000
Total Available	416,898,000	+7,920,000	+16,064,000	440,882,000

PROJECT STATEMENT
(On basis of adjusted appropriation)

Project	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
Meat and Poultry Inspection							
(a) Slaughter Inspection	$236,529,881	6,311	$242,272,000	6,348	+$14,843,000(1)	$257,115,000	6,450
(b) Processing Inspection	100,674,890	2,285	103,142,000	2,299	+5,419,000(2)	108,561,000	2,299
(c) Import-Export Inspection	10,048,917	205	10,481,000	206	+465,000(3)	10,946,000	206
(d) Laboratory Services	21,094,304	320	24,429,000	322	+1,309,000(4)	25,738,000	322
(e) Grants-to-States	36,480,000	--	36,574,000	--	+1,948,000(5)	38,522,000	--
Total, Meat and Poultry Inspection	404,827,992	9,121	416,898,000	9,175	+23,984,000	440,882,000	9,277
Unobligated balance lapsing	126,008	--	--	--			
Total available or estimate	404,954,000	9,121	416,898,000	9,175			
Gramm-Rudman-Hollings Reduction	--	--	5,901,000	--			
Total Appropriation	404,954,000	9,121	422,799,000	9,175			

EXPLANATION OF PROGRAM

The Food Safety and Inspection Service administers a national meat and poultry inspection program pursuant to the Federal Meat Inspection Act and the Poultry Products Inspection Act. These acts require ante-mortem and post-mortem inspection of domestic livestock and poultry, and the inspection during further processing of meat and poultry products. The major objective of the meat and poultry inspection program is to ensure that the Nation's commercial supply of meat and poultry products is safe, wholesome, and correctly labeled and packaged.

The Meat and Poultry Inspection program is responsible for uniformly applying inspection procedures and standards for sanitation, humane slaughter, facilities and equipment, and product labeling at all establishments under Federal inspection. It is also responsible for assessing the effectiveness of State inspection programs to assure that standards at least equal to those under the Inspection Acts are applied to meat and poultry establishments under State jurisdiction. Further, the program is responsible for reviewing foreign inspection systems and plants that export meat and poultry products to the United States, and inspecting imported products at ports of entry.

The Laboratory Services program supports meat and poultry inspection through the scientific examination of meat and poultry products for disease, contamination, or other forms of adulteration.

INSPECTION DATA

	1989 Actual	1990 Estimated	1991 Estimated
Federally inspected establishments:			
Slaughter plants......................	370	370	370
Processing plants......................	4,730	4,700	4,700
Combination slaughter and processing plants....................	1,287	1,280	1,280
Talmadge-Aiken Plants.................	336	336	336
Import establishments.................	220	225	225
Federally inspected production (millions of pounds):			
Meat slaughter........................	35,351	35,500	35,500
Meat processing.......................	74,100	76,300	78,600
Poultry slaughter.....................	29,581	31,700	33,900
Poultry processing....................	80,850	83,300	85,800
Import/Export activity (millions of pounds):			
Meat and poultry imported.............	2,516	2,620	2,654
Meat and poultry exported.............	3,324	3,790	4,171
Imports refused entry.................	13	12	12
States and territories with cooperative agreements:			
Intrastate inspection.................	28	28	28
Talmadge-Aiken inspection.............	22	22	22
Number of slaughter and/or processing plants (excludes exempt plants).....	3.485	3,500	3,500
Pounds inspected, slaughter and processing (millions)...............	5.092	5,100	5,100
Compliance activities:			
Hazardous product detained (millions of pounds)................	8.2	8.2	8.2
Compliance reviews....................	60.366	60,000	60,000
Detention actions.....................	1.126	1,100	1,100
Laboratory Services (samples analyzed):			
Food chemistry........................	62.435	62,000	62,000
Food microbiology.....................	36.908	37,000	37,000
Chemical residues.....................	185,163	185,000	185,000
Antibiotic residues...................	255,851	256,000	256,000
Pathology samples.....................	11,017	11,000	11,000

GAO REPORTS

Number	Date Issued	Date Completed	Description
RCED-87-142	9/30/87	--	"Imported Meat and Livestock" Chemical Residue Detection and the Issue of Labeling.
RCED-89-55	3/03/89	--	Internal Controls: Program to Address Meat and Poultry Plants Needs Improvement.
RCED-89-53	7/31/89	--	Review of FSIS Development of Performance-Based Inspection System.
OIG REPORTS			
24062-5-SF	5/09/89	--	Survey of Meat and Poultry Inspection Operations, Western Region
24062-6-SF	7/14/89	--	FSIS Conflict of Interest Statements.
24608-4-At	4/27/89	--	Evaluation of Compliance With Poultry Slaughter Procedures in Streamlined Inspection System Plants.
38002-4-Hy	3/29/89	--	Follow-Up Audit of the FSIS Imported Meat Process.
38097-1-AT	2/05/87	--	FSIS Exporting Procedures
38099-2-At	3/31/87	6/05/89	FSIS Controls Over Exporting Procedures.
38607-1-At	9/26/86	--	OIG National Audit of FSIS Meat and Poultry Inspection Program.
38609-1-At	11/17/88	--	Monitoring and Controlling Pesticide Residues in Domestic Meat and Poultry Products.

JUSTIFICATION OF INCREASES AND DECREASES

(1) An increase of $14,843,000 for Slaughter Inspection ($242,272,000 available in 1990) consisting of:

(a) An increase of $6,586,000 to maintain services at the current level. This increase will provide for the cost of rising Federal contributions to employees' retirement, health insurance, and workman's compensation funds and for the rising cost of goods and services.

(b) An increase of $5,230,000 to fund increased pay costs: an increase of $2,104,000 for the 1989 pay raise and $3,126,000 representing 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(c) An increase of $3,027,000 for in-plant staffing.

Need for Change. National production of meat and poultry continues to rise annually, with the largest increases occurring in poultry slaughter. The Federal Meat and Poultry Inspection Acts require inspection of every bird and animal at time of slaughter. FSIS has little flexibility in determining staffing levels, but must provide inspectors to inspect every meat and poultry slaughter line operated by the industry.

Nature of Change. The budget request for fiscal year 1991 includes $3,027,000 and 102 staff-years to provide required inspection coverage of the industry's animal and poultry slaughter operations.

(2) An increase of $5,419,000 for Processing Inspection ($103,142,000 available in 1990) consisting of:

(a) An increase of $3,274,000 to maintain services at the current level. This increase will provide for the cost of rising Federal contributions to employees' retirement, health insurance, and workman's compensation funds and for the rising cost of goods and services.

(b) An increase of $2,145,000 to fund increased pay costs: an increase of $847,000 for the 1989 pay raise, and $1,298,000 representing 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(3) An increase of $465,000 for Import-Export Inspection ($10,481,000 available in 1990) consisting of:

(a) An increase of $266,000 to maintain services at the current level. This increase will provide for the cost of rising Federal contributions to employees' retirement, health insurance, and workman's compensation funds and for the rising cost of goods and services.

(b) An increase of $199,000 to fund increased pay costs: an increase of $76,000 for the 1989 pay raise, and $123,000 representing 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(4) An increase of $1,309,000 for Laboratory Services ($24,429,000 available in 1990) consisting of:

(a) An increase of $963,000 to maintain services at the current level. This increase will provide for the cost of rising Federal contributions to employees' retirement, health insurance, and workman's compensation funds and for the rising cost of goods and services.

(b) An increase of $346,000 to fund increased pay costs: an increase of $152,000 for the 1989 pay raise, and $194,000 representing 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(5) An increase of $1,948,000 for Grants to States ($36,574,000 available in 1990) to maintain services at the current level. This increase will provide for the rising cost of goods and services consumed by the State inspection agencies.

Food Safety and Inspection Service

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS

1989 and Estimated 1990 and 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Alabama............	$13,011,381	354	$13,399,000	356	$14,170,000	360
Alaska..............	381,000	0	392,000	0	415,000	0
Arizona.............	1,518,959	28	1,564,000	28	1,654,000	28
Arkansas............	19,060,899	560	19,629,000	564	20,758,000	570
California..........	22,133,231	592	22,793,000	596	24,104,000	602
Colorado............	5,804,353	158	5,977,000	159	6,321,000	161
Connecticut.........	1,494,591	37	1,539,000	37	1,628,000	38
Delaware............	3,504,857	94	3,609,000	95	3,817,000	96
District of Columbia	55,718,522	664	57,379,000	667	60,682,000	678
Florida............	6,616,661	125	6,814,000	126	7,206,000	127
Georgia.............	22,780,143	544	23,459,000	547	24,809,000	553
Hawaii..............	1,161,217	5	1,196,000	5	1,265,000	5
Idaho...............	2,091,752	57	2,154,000	57	2,278,000	58
Illinois............	11,582,345	233	11,928,000	234	12,614,000	237
Indiana.............	6,317,978	125	6,506,000	126	6,881,000	127
Iowa................	14,805,705	391	15,247,000	393	16,124,000	398
Kansas..............	9,501,812	239	9,785,000	241	10,348,000	243
Kentucky............	4,244,700	112	4,371,000	113	4,623,000	114
Louisiana...........	4,192,787	79	4,318,000	80	4,566,000	80
Maine...............	1,143,300	29	1,177,000	29	1,245,000	29
Maryland............	8,191,914	179	8,436,000	180	8,921,000	182
Massachusetts.......	2,441,065	62	2,514,000	62	2,658,000	63
Michigan............	7,318,400	202	7,537,000	203	7,970,000	205
Minnesota...........	11,178,847	310	11,512,000	312	12,174,000	315
Mississippi.........	7,814,017	194	8,047,000	195	8,510,000	197
Missouri............	12,904,777	332	13,290,000	334	14,054,000	338
Montana.............	1,633,872	38	1,683,000	38	1,779,000	39
Nebraska............	10,123,057	282	10,425,000	284	11,025,000	287
Nevada..............	447,494	11	461,000	11	487,000	11
New Hampshire.......	378,409	10	390,000	10	412,000	10
New Jersey..........	4,778,005	124	4,920,000	125	5,204,000	126
New Mexico..........	1,211,190	23	1,247,000	23	1,319,000	23
New York............	10,656,830	279	10,975,000	281	11,606,000	284
North Carolina......	13,568,246	325	13,973,000	327	14,777,000	331
North Dakota........	1,030,001	26	1,061,000	26	1,122,000	26
Ohio................	10,054,313	167	10,354,000	168	10,950,000	170
Oklahoma............	4,234,812	74	4,361,000	74	4,612,000	75
Oregon..............	2,831,574	72	2,916,000	72	3,084,000	73
Pennsylvania........	16,956,680	447	17,462,000	450	18,467,000	455
Rhode Island........	447,334	11	461,000	11	487,000	11
South Carolina......	4,300,248	95	4,428,000	96	4,683,000	97
South Dakota........	2,868,547	71	2,954,000	71	3,124,000	72
Tennessee...........	6,352,789	167	6,542,000	168	6,919,000	170
Texas...............	29,148,788	596	30,018,000	600	31,745,000	606
Utah................	2,150,751	46	2,215,000	46	2,342,000	47
Vermont.............	499,786	7	515,000	7	544,000	7
Virginia............	8,018,727	195	8,258,000	196	8,733,000	198
Washington..........	4,416,855	118	4,549,000	119	4,810,000	120
West Virginia.......	1,447,381	23	1,491,000	23	1,576,000	23
Wisconsin...........	7,171,252	139	7,385,000	140	7,810,000	141
Wyoming.............	295,148	2	304,000	2	321,000	2
Guam................	33,942	1	35,000	1	37,000	1
Puerto Rico.........	2,362,466	62	2,433,000	62	2,573,000	63
Samoa...............	39,669	1	41,000	1	43,000	1
Virgin Islands......	63,996	1	66,000	1	70,000	1
Foreign Countries...	390,617	3	403,000	3	426,000	3
Total Available or Estimate.....	404,827,992	9,121	416,898,000	9,175	440,882,000	9,277

FOOD SAFETY AND INSPECTION SERVICE

STATUS OF PROGRAM

MEAT AND POULTRY INSPECTION

Current Activities. Program responsibilities include:

1. Inspecting before and after slaughter those birds and animals intended for use as food for humans and supervising the further processing of meat and poultry products.

2. Assuring that meat and poultry products are safe, wholesome, and properly labeled, and preventing the movement or sale in commerce of any meat and poultry products which are adulterated, unwholesome, or mislabeled.

3. Monitoring allied industries to prevent uninspected, unwholesome, or mislabeled meat and poultry from illegally entering channels of commerce.

4. Conducting emergency operations in connection with the voluntary recall of meat and poultry products contaminated with drug or chemical residues, other adulterants, or microbial contamination.

5. Reviewing and assessing the effectiveness of State inspection programs to assure that standards at least equal to those under the Federal Acts are applied to meat and poultry plants under State jurisdiction.

6. Reviewing and assessing foreign inspection systems and facilities that export meat and poultry to the United States to assure that standards are maintained equal to those in the United States. Reinspecting imported meat and poultry products at port of entry to assure that product meets Federal standards.

7. Facilitating the export of U.S. meat and poultry products by obtaining the inspection requirements of foreign governments, and negotiating the equivalence of U.S. inspection procedures.

8. Providing pathological, microbiological, chemical and other scientific examination of meat and poultry products for disease, infection, contamination, or other types of adulteration.

9. Conducting a microbial monitoring and surveillance program.

10. Conducting a national residue program, including residue avoidance efforts.

11. Conducting epidemiological investigations based on reports of foodborne health hazards and disease outbreaks.

12. Developing new methodology to reduce inspection costs and improve inspection quality.

13. Assuring that inspection operations are carried out effectively and efficiently.

14. Providing public information to assure the safe handling of meat and poultry products by consumers.

Selected Examples of Recent Progress:

1. Hazard Analysis and Critical Control Point (HACCP) Project

In September, 1989, FSIS formed a task force to begin the adoption of HACCP principles to the meat and poultry inspection program. HACCP, which was recommended for use in the meat and poultry program by previous National Academy of Sciences reports, is a system for process control first developed in the food processing industry. During the early 1970's, HACCP was applied to low-acid canned foods through FDA rulemaking.

HACCP is a system for preventing the production of unsafe food products, thus eliminating the need to retain or recall contaminated product at a later point in processing or distribution. HACCP requires the application of controls throughout the entire process of slaughter, processing, and delivery to the retailer and the consumer. The development of a system for the meat and poultry inspection program requires:

* Assessment of the hazards associated with animal husbandry, slaughter, processing, manufacturing, distributing, packaging, preparing, and consuming meat and poultry food products.

* Analysis of the slaughter and processing procedures in use in the industry to discover the critical points in the process where particular attention is required to control the identified hazards.

* Establishment of the critical limits within which the process must operate at each control point: for example, required time and temperature combinations necessary to destroy bacteria.

* Establishment of inspection procedures sufficient to assure adequate monitoring of the critical control points.

* Establishment of corrective actions required to be taken by the processor when the process deviates from its control limits at a critical control point.

* Maintenance of effective recordkeeping by both the processor and the inspection program.

* Establishment of procedures for continuous monitoring, testing and review of industry performance to verify that the system is functioning in a manner that will maintain the safety of the food supply.

FSIS has, for a number of years, employed inspection procedures which share the general approach used by HACCP in a more informal manner. The Total Quality Control program for processing plants, used throughout the 1980's, shares many of the concepts used by HACCP. In adopting HACCP, FSIS must give consideration to several issues which bear on the degree of success that can be anticipated in the adaptation of HACCP to inspection of meat and poultry food processing.

First, it must be recognized that the Agency does not have the legal authority to oversee the entire meat and poultry production cycle. The Agency's authority under the Meat and Poultry Inspection Acts begins with the arrival of the animal at the packing plant and ends with distribution of the product to retail channels. The success of the Agency's efforts to assure the safety of meat and poultry food products also requires action from other agencies, from producers, and from food preparation establishments and homemakers at every step of the process. A breakdown of the process at any point could constitute a threat to public health. Education campaigns will be a major part of the Agency's HACCP program.

Second, HACCP, to be properly applied, relies on a concrete analysis of specific processing operations. This analysis, plant by plant and operation by operation, will require detailed briefing and training of industry managers and FSIS inspection personnel.

Third, the HACCP system is designed to assure food product safety, which is the Agency's principal concern; however, the inspection acts also require the program to assure product sanitation and prevent economic fraud. In developing HACCP procedures it will be necessary to incorporate into them provisions for meeting these requirements.

2. Performance-Based Inspection System (PBIS)

An automated scheduling system for processing plants, which will assist Agency managers in better scheduling inspection tasks to maintain full coverage of all inspection operations, is now operating nationwide. The system has been undergoing modifications to improve its flexibility and allow the inspector more discretion in reacting to situations involving potential adulteration or economic fraud. A 1989 GAO report on the system concluded that the system was basically sound but recommended that FSIS evaluate the adequacy of data gathered and build more flexibility into the system. Two inspection program working groups are focusing on the details of these recommendations. Suggestions from individual inspectors, the industry, and employee organizations have provided valuable information on ways of improving the system.

3. Training Center

On May 24, 1989, FSIS and Texas A&M University dedicated the new Donald L. Houston Training Center for Meat and Poultry Inspection Sciences. The late Dr. Houston, beginning as a veterinary inspector, served in many posts in the inspection program and was Administrator of the Agency from 1979 to 1987.

The training center houses the national training program for Federal meat and poultry inspectors. Modern inspection methods, with their reliance on the inspector's understanding of scientific methods, are best taught at a University strong in the veterinary and food sciences. The new training center meets this requirement. The training courses and materials which had been developed at the former training center in Fort Worth, Texas, are now being augmented by new modules developed with the assistance of the Texas A&M faculty. The Houston Center is able to provide specialized education in food chemistry, risk analysis, veterinary pathology, statistics, and computer science. University and FSIS instructors share the instructional tasks at the new center.

4. Improved Processing Inspection

In November 1988, FSIS published proposed regulations for its Improved Processing System which would have implemented the 1986 amendments to the Federal Meat Inspection Act. The proposal called for varying the intensity of inspection at meat and poultry processing plants according to each plant's ability to consistently produce safe and wholesome product in a sanitary environment. This proposal, which would have scheduled only occasional inspector visits to the best operated plants, was a change from the practice of many years of requiring an inspector to visit every processing plant at least once daily.

After receiving over 1,800 comments on the proposal, with the overwhelming majority opposed to the new proposal, the Agency announced in May 1989 that it was withdrawing the proposal. FSIS also announced that it would gather additional information regarding a processing inspection system, and would then determine whether a new proposal is to be published.

5. Labeling Initiatives

USDA and the Department of Health and Human Services have formed a joint task force to develop uniform and effective standards for the display of nutrition related information on food labeling in the United States. The effort is in response to recent reports, including the Surgeon General's *Report on Nutrition and Health* and two reports from the National Academy of Sciences, *Designing Foods*, and *Diet and Health: Implications for Reducing Chronic Disease Risk*. The reports emphasized the importance of providing consumers with nutritional information that allows them to make informed dietary decisions. FDA is holding a series of hearings across the country during late 1989 to gather public comment on these issues. Contracts jointly supported by the two agencies will support development of labeling ideas.

6. Microbiological Criteria for Foods

Since January 1989, the National Advisory Committee on Microbiological Criteria for Foods has met four times--in January, March, May and June. They have submitted recommendations to the Secretaries of Agriculture and Health and Human Services on labeling for sensitive products, on education and training for regulators, industry members and consumers, and on needed research. Three working groups comprised of members from the full committee have been convened: a Meat and Poultry Working Group, a Seafood Working Group, and a Hazard Analysis Critical Control Point Working Group.

The Meat and Poultry Working Group is developing recommendations for maintaining the safety of processed refrigerated foods containing cooked, uncured meat or poultry. The Hazard Analysis Critical Control Point Working Group has been preparing a guide that can be used in applying specific scientific principles designed to assure product safety from harvest through ultimate consumption.

7. Listeria

In April, USDA announced a recall of one brand of turkey franks since there was reason to believe that some of the product might have been contaminated with *Listeria* bacteria. The plant concerned stopped production and held all turkey franks remaining at the plant. The Centers for Disease Control connected consumption of the turkey franks with a case of Listerial meningitis. This was the first case of human listeriosis in the United States resulting from consumption of meat or poultry.

In May, FSIS announced a revised policy for *Listeria* testing and control of ready-to-eat meat and poultry products. The new policy calls for an increase in the number of samples analyzed for *Listeria monocytogenes* and in the size of the sample drawn for laboratory testing. End-of-shelf-life testing of retail-size packages was begun. New recall guidelines are also part of the policy.

Sampling of ready-to-eat retail size packages began in July, and when a sample is found to contain *Listeria*, the sampled lot is considered adulterated; if it has been shipped in commerce, a recall of the product is initiated. When a *Listeria*-positive result is found in a sample portion from a large size product, FSIS will test subsequent production from the same plant to determine whether there is a continuing problem before considering recall action. The Agency is also planning a special training program for inspectors to sharpen their awareness of the procedures necessary to control this hazard. A meeting with industry representatives has been held to explain the new policy.

During the month of August, in response to findings during routine USDA testing, a West Virginia food processing firm voluntarily recalled over 1,000 pounds of ham salad suspected of being contaminated with *Listeria*.

Listeria has proven difficult to control, as it can continue to grow slowly on refrigerated foods. FSIS is urging State and local health services to set retail temperatures of 40 degrees F. or less and to enforce sell-by dates. The bacteria have the potential to cause serious illness. Those consumers with weakened immune systems are particularly vulnerable.

8. Seafood Inspection

USDA officials have testified at a number of hearings during 1989 on proposed legislation regarding the nation's seafood inspection system which is now operated by the Food and Drug Administration, the Department of Commerce, and State Governments. Several bills have proposed placing the in-plant portion of a new, mandatory inspection system in USDA.

9. United States-European Community Hormone Dispute

On January 1, 1989, the European Community (EC) ban on imports of hormone-treated beef took effect, halting an annual estimated $100 million worth of beef exports, mostly offal. The U.S. retaliated by placing a 100 percent tariff on $100 million worth of EC food products.

In March, the first meeting of a task force to study the trade dispute took place in Washington. The task force is composed of members of the U.S. Trade Representative's Office and the Department of Agriculture. They met with representatives of the EC, and have reached an interim agreement in one area. U.S. producers who wish to export meat not treated with hormones may enter into a commercial agreement with the EC itself. The animals must be slaughtered in a U.S. plant which has been approved by the EC. Few producers have participated in this program to date.

10. Heptachlor Contamination in Arkansas

Surveillance testing at 25 livestock and poultry slaughtering plants in Arkansas was begun in February after heptachlor was detected in chickens from certain flocks in Arkansas. The company concerned voluntarily destroyed more than 400,000 chickens and two million pounds of fresh and processed product which were in storage or recalled. Some additional heptachlor contamination was discovered in swine, eggs, and feed mills. Contaminated feed was the suspected cause. In early May, FSIS increased its surveillance testing to encompass all Arkansas poultry and hog slaughtering plants, and in late May extended the program to nine other states.

The Environmental Protection Agency has banned heptachlor for all agricultural uses except as a seed treatment since 1978. In May 1989, EPA also banned its use as a seed treatment.

After testing through the end of August in Arkansas and nine nearby States, FSIS' analysis of over 1,700 poultry samples from 70 plants and over 2,100 swine samples from 146 plants had found only one instance of heptachlor residues, in a hog. Efforts were made to trace this hog to its source. FSIS has found no evidence of a heptachlor contamination problem in the area and has returned to routine monitoring.

11. Investigations of Poultry Inspection Slaughter Systems

USDA's Office of Inspector General recently completed an audit of 14 poultry plants, primarily in the Southeast. OIG reported that FSIS has been successful in its implementation of more efficient systems for poultry, such as the Streamlined Inspection System (SIS). About 90 percent of poultry is now inspected using SIS and other improved methods introduced since 1984.

The OIG audit was a follow-up to a 1986 audit which found deficiencies in some sanitation inspections. The 1988 OIG review found that FSIS had taken corrective action and found no significant problems during the audit.

In October of 1988, FSIS requested the Agricultural Research Service to again study the microbial quality of chickens which have been reprocessed--washed in chlorinated water--after contamination with digestive tract contents. ARS had published a study in 1975 which found no significant differences in microbial quality between reprocessed and other birds which had not been contaminated with digestive tract contents. The 1989 study confirmed the 1975 findings and again discovered no significant differences in bacteria levels.

12. Other Regulatory Actions

Recalls

In November 1988, a Salt Lake City firm recalled about 20,000 fresh whole turkeys because some may have contained spoiled giblets or necks.

In February, a Madison, Wisconsin company recalled about 33,000 pounds of undercooked ham.

In May 1989, a Cedar Rapids, Iowa, food processing firm voluntarily recalled about 9,000 pounds of cooked canned hams which were suspected of being undercooked and might have been a cause of trichinosis if eaten; however, no illnesses were reported.

Proposed Rules

In October 1988 the Agency proposed to amend the regulations to permit the use of wheat gluten, tapioca dextrin, whey protein concentrate, and sodium caseinate as binders in various meat and poultry products. These substances are generally recognized as safe by the Food and Drug Administration for use in foods. The proposal would also transfer text references for specific binders from the individual product standards in the regulations to the tables of approved substances, thus eliminating repetition and consolidating all information about approves substances in one place in the regulations.

In December, the Department proposed revised processing and labeling requirements to assure the safety of fully cooked, partially cooked, and char-smoked ground meat patties. The Agency is concerned since foodborne pathogens can survive in such products. Consumers often erroneously believe the products to be fully cooked. The proposed rule would establish requirements for storage of raw ingredients, processing times and temperatures, handling procedures to prevent post-processing contamination, and label instructions for final cooking. In 1988, a strain of *E. coli* was linked to an outbreak of food poisoning which hospitalized six Minnesota school children.

In January, the Agency proposed regulations allowing cattle and hog slaughter plants to inject air into carcasses to aid in the dressing operation.

In January, the Agency proposed regulations to allow a mixture of sodium alginate, calcium carbonate, lactic acid, and calcium lactate as a binder in ground and formed poultry products. All the substances are generally recognized as safe by the Food and Drug Administration, and product labeling would notify customers of their use. The mixture would be an alternative to sodium chloride and potassium salts now used as binders, and may reduce the sodium content of the formed products.

In February, the Agency proposed regulations to amend the definition, product standard and labeling requirements for Turkey Ham products. Compliance procedures to assure conformance with the new requirements would be based on contemporary statistical science applied to current processing of cured pork products.

In February, FSIS reopened for 90 days the comment period on proposed changes in the cattle inspection system. Under the new proposals, plants would be responsible for removing such dressing defects as hair, dirt, and hide remnants. Inspectors would monitor compliance with this process through statistical sampling of the finished product. The proposed system aims at increasing inspection efficiency by providing more time for the inspectors to concentrate on detection of disease conditions.

In March, the Agency proposed new regulations to ensure correct net weight designations on meat and poultry product labels. The proposed changes would incorporate handbooks used by the National Conference on Weights and Measures. The rule changes are designed to improve the ability of Federal, state, and local agencies to enforce strict net weight standards, and to make USDA regulations more uniform with those of the Food and Drug Administration. The proposal would allow state and local inspectors to use either dry or wet tare compliance testing methods. Dry tare, which FSIS uses and recommends, assumes that the liquid accompanying the product is part of the product. In wet tare testing, the liquid is not included with the product's weight. The proposal also contains an agreement between State and Federal officials defining concurrent authority over products after they leave Federal establishments.

In March, FSIS proposed new processing and labeling requirements for partially-cooked, cured breakfast strips made from poultry. This new product is of particular interest to consumers seeking an alternative to beef strips and pork bacon for dietary or religious reasons. The new regulations would require specific label notices alerting customers to keep the product frozen or refrigerated and to further cook the product before eating.

In April, the Agency proposed new procedures authorizing substitution of potassium chloride for some of the sodium chloride used in curing country hams to destroy trichina parasites.

In August, FSIS published a notice prior to formal rulemaking, seeking comments on a new system to be used by the Agency to review and approve rapid residue and microbial tests, developed outside the Agency, for use in the inspection program. A uniform procedure for reviewing such tests would accelerate the process and improve industry and university awareness of FSIS requirements. The system should enable the placement of new analytical procedures in FSIS laboratories and plants shortly after they become commercially available.

Final Rules

In December of 1988, the Agency prohibited the use of livestock thyroid glands and surrounding tissue in meat food products. Excess amounts of thyroid hormones can cause symptoms such as nervousness, sleeplessness, increased heart rate, and shortness of breath. These symptoms can be serious, especially for sufferers of heart disease.

In December, USDA reinstated Mexico as a country eligible to export red meat products to the United States. Mexico had been removed from the list of eligible countries in February, 1984, because it lacked a satisfactory residue testing and species verification program. Reviews of Mexico's laws, regulations, and other documents and on-site visits confirmed that the program now meets USDA standards. USDA estimates that Mexico could export about 2.5 million pounds of meat products annually to the U.S.

In December, the Department required that slaughter plants using electrical stimulating equipment follow new safety and sanitation procedures. There are about 200 such units in operation. The equipment is used to increase meat tenderness and reduce shrinkage.

In January 1989, the Agency announced a final rule that would allow plants to use certain acidic substances to maintain the color of fresh pork cuts. Fresh pork loses its color long before it becomes unsafe. Use of the approved chemicals, such as ascorbic acid and sodium citrate, requires a partial quality control program in the plants and notification on product labeling.

In February, the Agency expanded voluntary inspection of exotic animals to include elk, deer, antelope, reindeer and water buffalo used for food. Currently, less than 2,000 exotic animals are slaughtered annually under the fee-paid inspection program, and this number is not expected to change substantially.

13. Enforcement Actions

The strongest administrative penalty USDA can apply to firms violating the inspection acts is withdrawal of the grant of Federal inspection, after which it is illegal for a company to prepare meat and poultry products for sale. The Department often negotiates consent agreements with businesses found in violation, whereby USDA can quickly withdraw inspection upon repeat violations. For example:

> In March, a company in Minnesota entered into a consent agreement with USDA requiring strict monitoring and oversight provisions, following findings that it had been selling adulterated sausage and other products. If the company does not adhere to the provisions of the agreement, the Department will take steps to withdraw inspection from the firm. The company and three of its officials were convicted in 1987 of selling product that contained pork and poultry products as beef sausage. The Defense Logistics Agency (DLA) also negotiated a consent agreement with the company. Part of the company's agreement with USDA requires that it meet all the provisions of its agreement with DLA, including the prohibition of contact between the trustees of the company and the former owners and officers of the company.
>
> In July, another Chicago meat company owner signed an agreement with USDA to sell or close his company after conviction on two counts of bribery. USDA had moved to withdraw Federal meat inspection from his two companies and grading services from one of them.

During 1989, the threat to withdraw inspection was carried out in several cases. For example,

> In May, USDA ordered Federal meat inspection services withdrawn indefinitely and grading services withdrawn for a period of ten years from a Chicago company. The firm's president had been convicted of mail fraud and giving money to Federal meat graders, who cooperated in the USDA investigation of the firm.

Small plants exempt from the continuous inspection requirements of the law must abide by sanitation requirements and allow periodic review of their plants. They must not sell meat or poultry commercially. Several cases involved exempt plants. For example,

> In August, a Federal court issued a five-year consent decree and order permanently enjoining an Idaho meat company and its owner from violating the Federal inspection laws. On five occasions during 1987, the owner refused to allow meat inspection officials to review his facility and was abusive and belligerent to them.
>
> In August, the owner of an Arkansas custom slaughter and processing operation was fined $1,500 and given three years probation after conviction for offering for sale meat from animals slaughtered without inspection.

Courts also levy fines and other penalties on plants. For example,

> In May, the Department announced that a Federal court has fined a New York City company $50,000 and sentenced its president to three years of probation for holding and shipping rodent-contaminated meat.
>
> In April, the owner of a Texas sausage company was fined $5,000 and placed on probation for three years for adding soy and sodium nitrite to sausage products labeled as fresh pork sausage.
>
> In July, a Philadelphia food distributor was fined $75,000 after pleading guilty to charges of selling adulterated canned hams.
>
> In August, USDA announced that a Brooklyn, N.Y. company was fined $30,000 after pleading guilty to charges of holding and shipping meat and poultry products held under unsanitary conditions, rodent-contaminated, and/or uninspected. Prosecution of the firm's owner was deferred as long as he complies with specific terms of an agreement, including not violating any Federal, State, or local laws for six months.

MONDAY, MARCH 12, 1990.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

WITNESSES

JO ANN R. SMITH, ASSISTANT SECRETARY FOR MARKETING AND INSPECTION SERVICES

JAMES W. GLOSSER, ADMINISTRATOR, ANIMAL AND PLANT HEALTH INSPECTION SERVICE

LARRY B. SLAGLE, ASSOCIATE ADMINISTRATOR

LONNIE J. KING, DEPUTY ADMINISTRATOR FOR VETERINARY SERVICES

BOBBY R. ACORD, ACTING DEPUTY ADMINISTRATOR FOR ANIMAL DAMAGE CONTROL

RICHARD R. BACKUS, ACTING DEPUTY ADMINISTRATOR FOR PLANT PROTECTION AND QUARANTINE

MICHAEL C. GREGOIRE, ACTING DIRECTOR, BUDGET AND ACCOUNTING DIVISION

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Mr. WHITTEN. The committee will come to order. Today, we have the Animal and Plant Health Inspection Service. Ms. Smith is with us again. Be glad to hear from you.

Ms. JO ANN SMITH. Thank you, sir. Mr. Chairman, it is a pleasure to appear before the committee today in support of the budget request for the Animal and Plant Health Inspection Service. Certainly APHIS, its programs, its personnel, play a very vital role in protecting the animal and plant industry, both commercial and private in the United States. Its inspectors are stationed at our borders to defend the health of American agriculture from foreign diseases and pests.

Other inspectors, small in number, work abroad to reduce the risk from those same foreign diseases and pests and still others work to control or eliminate agricultural diseases and pest problems here at home.

I will cite one of those problems that we are currently involved with, the Mediterranean fruit fly infestation in California. John Q. Public today does not realize the dollars that are saved by APHIS because of the protection that they provide and the work that they do.

Infestations demonstrate the need for more inspectors and more technology. Because those who create the risks should bear the costs, we are proposing legislation to pay for the program, part of it through user fees for agricultural quarantine inspection.

Whether it is medfly, boll weevil, brucellosis, pseudorabies, noxious weeds, ostriches, llamas, or animal welfare, APHIS every day is affecting or attracting the attention of almost every American.

Mr. Chairman, with your permission, I will now ask Dr. Glosser, the Administrator of APHIS, to continue with the budget presentation.

Mr. WHITTEN. Dr. Glosser, we are glad to hear from you.

INTRODUCTION OF ASSOCIATES

Dr. GLOSSER. It is a pleasure to present the 1991 budget request for the agency. I would like to introduce Mr. Larry Slagle, Associate Administrator, and Lonnie King, Deputy Administrator for Veterinary Services; Dick Backus, Deputy Administrator for Plant Protection and Quarantine; Bob Acord, the Acting Deputy Administrator for Animal Damage Control; and the Acting Director of our Budget and Accounting Division, Mr. Mike Gregoire.

Mr. WHITTEN. Those who haven't been here before, their biographical sketch will be included in the record.

[CLERK'S NOTE.—The biographical sketch of Mr. Acord appears on page 404.]

APHIS MISSION

Dr. GLOSSER. Amplifying Secretary Smith's introduction, the mission of APHIS can be divided into three quick objectives: To protect American agriculture and the food supply by providing leadership in the health and care of animals and plants; to improve American agricultural productivity and competitiveness; and to contribute to our Nation's economy and public health.

The activities that APHIS conducts fall into five functional areas.

[The chart follows:]

APHIS MISSION

- PEST & DISEASE EXCLUSION
- PLANT & ANIMAL HEALTH MONITORING
- PEST & DISEASE MANAGEMENT PROGRAMS
- ANIMAL CARE
- SCIENTIFIC & TECHNICAL SERVICES

Dr. Glosser. First, pest and disease exclusion is our number one, primary mission underpinning all of our efforts. This is accomplished through inspection and quarantine activities. Our first line of defense is the agricultural quarantine inspection program. This function also includes preclearance programs with other countries importing materials into the U.S., foreign pest and disease cooperative control programs, and export facilitation.

The second functional area is plant and animal health monitoring, which involves surveillance of the health as well as the disease of America's national herds and flocks and plants through constant monitoring. We feel that this is necessary to give us the information necessary for export enhancement and facilitation. Programs like the national animal health monitoring system will provide rapid detection and an information base should there be an incursion of an agricultural, pest or disease that penetrates our first line of defense.

Pest and disease management programs are the prevention, detection, control, and eradication programs. We monitor the interstate movement of products and we have a vital role in predator control, both of wildlife vertebrates and also birds that attack agricultural products.

The fourth area is animal care, including administration of the Animal Welfare Act, which states that we are to monitor humane treatment and ensure that well-being of animals used in research, exhibition, and interstate commerce. We also enforce the Horse Protection Act.

The fifth area, scientific and technical services, includes methods development and also gives us the tools necessary to add sensitivity and specificity to our regulatory decisions in these other functional areas. This area is also responsible for the licensing of veterinary biologics to ensure their safety, purity and efficacy.

In the area of biotechnology, we enforce regulations that ensure the safety of these products when they are released or introduced into the environment. In the veterinary diagnostics program we supply diagnostic support to our control programs.

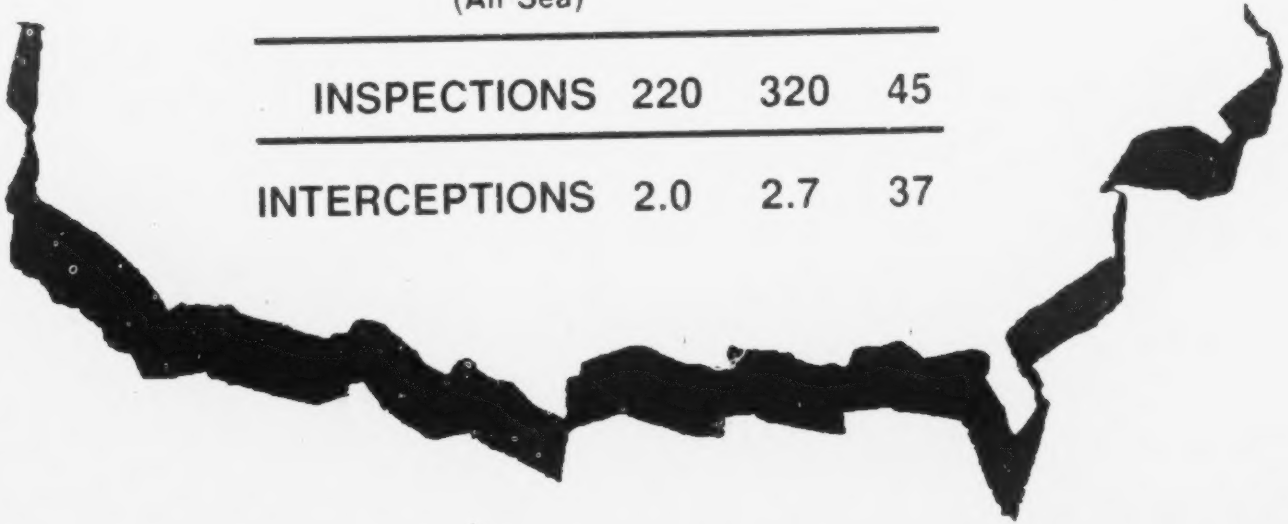
RECENT ACCOMPLISHMENTS

Looking at the statistics for the agricultural quarantine inspection program—and comparing the years 1984 to 1989, there was a 28 percent increase in number of people that came into the United States by air and sea. Inspections have increased 45 percent in that same time and interceptions of prohibited material has increased 37 percent. In the budget for this function, we have asked for a $10.3 million increase for workloads and increased operational costs.

[The chart follows:]

AGRICULTURAL QUARANTINE INSPECTION

	(Millions) '84	'89	CHANGE FROM '84
PEOPLE (Air Sea)	27.2	35	28
INSPECTIONS	220	320	45
INTERCEPTIONS	2.0	2.7	37



BRUCELLOSIS ACCOMPLISHMENTS

Dr. GLOSSER. Turning to a program the committee is well aware of, the brucellosis program, I have chosen the years 1984 to 1989 to show some of the progress. My feeling is that these pictures are worth 10,000 words.

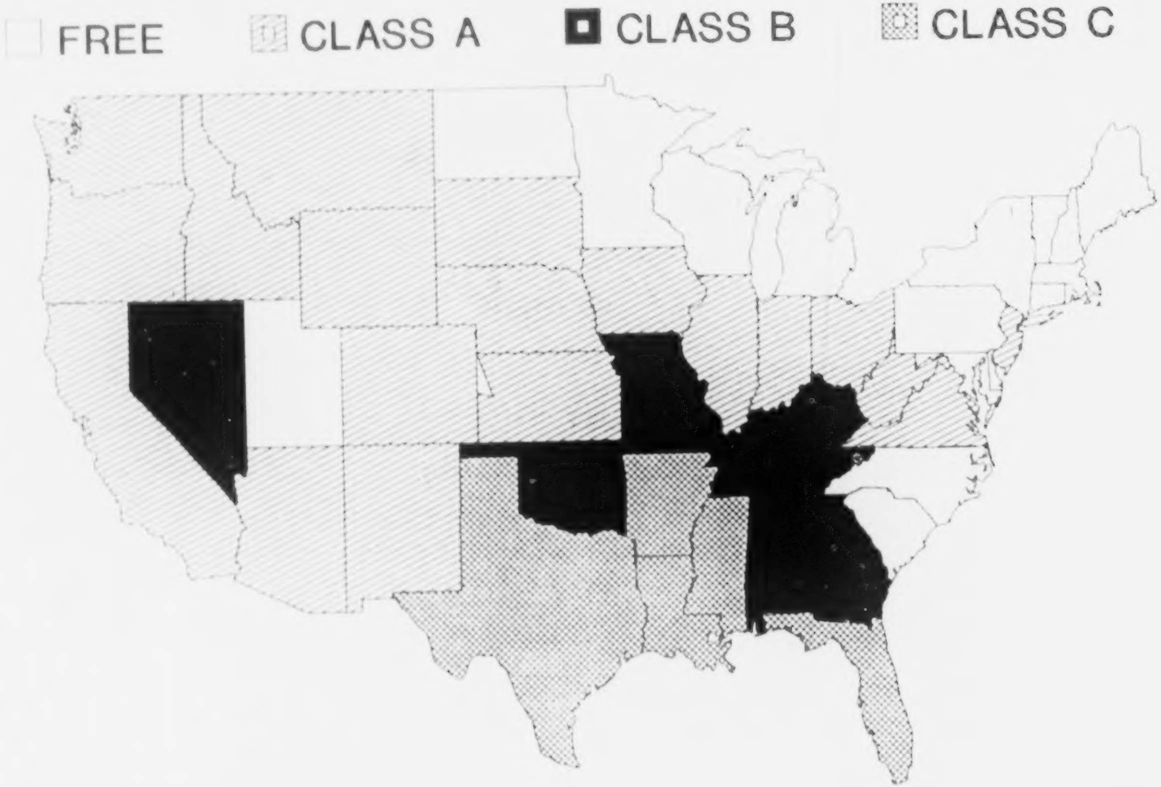
The areas in 1984 show the States that had the highest incidence of brucellosis.

Next, the class "B" States, are making very good progress. The white areas are those states that have been free of this infection for at least one year.

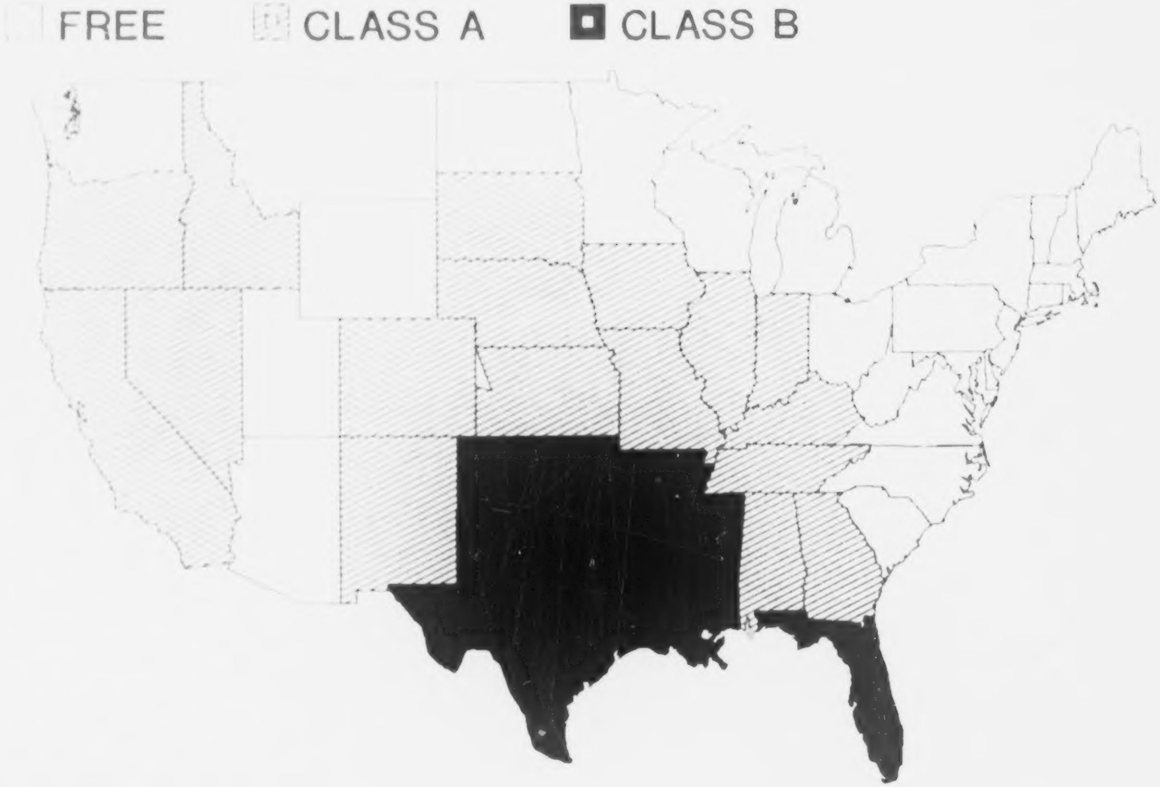
In 1984, we had 19 free states. Now, we have 28. Indiana just joined the ranks within this past month. Clearly, the progress that has been made in the southeastern U.S. in brucellosis is very, very commendable. Basically, there has been at least a 25 percent annual reduction in infection in recent years.

[The charts follow:]

BRUCELLOSIS - 1984


FREE
CLASS A
CLASS B
CLASS C

BRUCELLOSIS - 1989


FREE
CLASS A
CLASS B

Dr. Glosser. I would like to briefly cover some of the statistics of the brucellosis program. If you compare 1988 to 1989, we have seen a 28 percent drop in new infected herds. More important, the number of quarantined herds has declined 40 percent in this last year. Clearly, we are in the last throes of wrapping this program up and eradicating this disease from the continental U.S.

[The chart follows:]

BRUCELLOSIS

NEW INFECTED HERDS		HERDS UNDER QUARANTINE AS OF DEC 31
8,483	1984	5,700
6,985	1985	4,129
5,582	1986	3,295
4,752	1987	2,967
3,514	1988	2,188
2,502	1989	1,231

BOLL WEEVIL ACCOMPLISHMENTS

Dr. GLOSSER. Another program in which we have made significant progress is the boll weevil program, including the Southwest program, the High Plains program, and the Southeast program.

The Southeast program includes the four States of Georgia, Alabama, South Carolina and Florida. In 1987 when we started, weevil counts were estimated at between 3,500 to 4,000 weevils per acre. In one year, the first year of the eradication phase, we reduced that to 1.4 weevils per acre and in 1989, to 0.9 weevil per acre. Adverse climatic conditions, a wet environment, and a very mild winter increased operational costs to the boll weevil program, but the resulting problems are being addressed.

FISCAL YEAR 1991 BUDGET

In summary, Mr. Chairman, we are presenting today a budget request for salaries and expenses of $367,950,000. This represents a 5.9-percent increase over the 1990 appropriation; $16.5 million is for pay costs and increased operating costs. There is a net $4 million program increase included in the salaries and expenses request.

In buildings and facilities, there is an increase of $11.8 million, which includes three major initiatives that are of vital importance to fulfillment of APHIS's mission.

One is the phase A of the plant germ quarantine center at Beltsville, MD. The Denver Wildlife Research Center is building animal holding facilities in Fort Collins, CO, to conduct further research. We also plan to consolidate our laboratories at the Plum Island Animal Disease Center into one operational unit, combining diagnostics along with the research efforts of ARS.

[The chart follows:]

BUDGET SUMMARY

$ in Thousands

	1990	1991
SALARIES & EXPENSES	$347,366	$367,950
BUILDINGS & FACILITIES	13,608	25,396
TOTAL	$360,974	$393,346

Dr. GLOSSER. Mr. Chairman, I appreciate the committee's support of our budget in past years. We would be happy to answer questions you may have.

[CLERK'S NOTE.—Dr. Glosser's written testimony appears on pages 405 through 416. The Animal and Plant Health Inspection Service explanatory notes appear on pages 417 through 500.]

Mr. WHITTEN. Thank you very much, Doctor. I have been on this committee for a long time. Most all of us have been on here for a number of years and we have seen as a matter of history that as things are produced in great numbers, the problems with them are increased proportionately. I was here when someone tried to get approval for treating the fire ants once but not for treating them twice. Treating them once made them get fat but didn't kill them. We have never been able to get the second dose approved.

I have seen the effects of this on people in Georgia and other places. I haven't been in the specific area of Mississippi, but they are there. When you look at the map, we are losing out in our efforts to control the fire ant. If anybody ever gets stung by the ant they realize how dangerous it is. I have seen folks crippled playing golf, and in view of the financial problems that we have in agriculture there are more golfers than farmers in some areas.

BUDGET REDUCTIONS

It makes me wonder about these other things. According to the record, you are asking us to reduce appropriation to handle the boll weevils, $3,168,000. I notice a number of states where it is a real problem; you make no claim to having made progress.

Cattle ticks, you are reducing the amount requested by $1,870,000. Grasshoppers, which can really destroy the west, you are asking for a reduction of $2,562,000; fire ant, $2,722,000. For pink bollworm, $339,000. Russian wheat aphid, $898,000, and scrapie, which we saw last year because it was spreading so much among sheep, you want to cut that $1,085,000.

Put in the record what you requested of the Department of Agriculture and what they in turn requested of the OMB.

[The information follows:]

FISCAL YEAR 1991 APPROPRIATION HISTORY
(Dollars in Thousands)

	Agency	Department	Budget Request
PEST & DISEASE EXCLUSION:			
Agricultural quarantine ins.	74,580	74,415	74,969
Foot-and-mouth disease	4,609	3,895	3,924
Import-Export	13,147	8,935	9,001
International programs	4,794	4,459	4,492
Mediterranean fruit fly	12,574	10,354	10,431
Mexican fruit fly	1,860	1,732	1,745
Screwworm	35,541	33,144	33,391
Subtotal, Pest & Disease	147,105	136,934	137,953
PLANT AND ANIMAL HEALTH MONITORING:			
Animal disease detection	13,439	9,188	9,256
Pest detection	4,370	4,109	4,140
Subtotal, Plant & Animal Health	17,809	13,297	13,396
PEST AND DISEASE MANAGEMENT PROGRAMS:			
Animal damage control-operations	24,202	24,108	24,288
Aquaculture	550	--	--
Animal Health Comp. & Enforc.	19,422	12,263	12,354
Biocontrol	9,523	7,290	7,344
Boll weevil	14,932	9,743	9,816
Brucellosis eradication	91,950	64,075	64,553
Caribbean fruit fly	300	--	--
Cattle ticks	6,522	4,427	4,460
Citrus canker	1,255	1,255	1,264
Golden nematode	812	802	808
Grasshopper & Mormon cricket	6,036	6,033	6,078
Gypsy moth	5,627	4,841	4,877
Honey bee pests	2,383	498	502
Imported fire ant	[1]--	1,541	1,552
Misc. Plant & animal Diseases	4,728	3,258	3,282
National poultry imp. plan	290	227	229
Noxious weeds	584	585	589
Pink bollworm	1,005	1,003	1,010
Poultry diseases	5,690	668	673
Pseudorabies	7,893	3,052	3,075
Russian wheat aphid	[2]--	--	--
Scrapie	[3]--	--	--

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[1] Methods development work for imported fire ant is provided in the plant methods development line item.

[2] Funding is provided in the biocontrol line item.

[3] Funding is provided in the miscellaneous pest line item.

	Agency	Department	Budget Request
Swine health protection	4,089	3,392	3,417
Tuberculosis	4,670	3,627	3,654
Witchweed	5,169	5,106	5,144
Subtotal, Pest & Disease	217,632	157,794	158,969
ANIMAL CARE			
Animal welfare	9,465	8,624	8,688
Horse protection	357	356	359
Subtotal, Animal Care	9,822	8,980	9,047
SCIENTIFIC AND TECHNICAL SERVICES:			
ADC methods development	9,343	7,706	7,763
Biotechnology	6,507	6,470	6,518
Plant methods development	5,505	5,458	5,499
Veterinary biologics	9,479	9,437	9,507
Veterinary diagnostics	16,556	14,688	14,798
Subtotal, Scientific & Technical	47,390	43,759	44,085
Contingency fund	4,697	4,500	4,500
TOTAL, SALARIES AND EXPENSES	444,455	365,264	367,950
BUILDINGS AND FACILITIES	49,855	30,173	25,396

Dr. GLOSSER. Do you want it for the record, Mr. Chairman?

Mr. WHITTEN. Yes, I want it for the record. Surely, when you are testifying you brought those figures with you?

Dr. GLOSSER. Yes, we have.

Mr. WHITTEN. I know that you could anticipate we would ask you about it.

BOLL WEEVIL

Dr. GLOSSER. In the boll weevil program, the agency request——

Mr. WHITTEN. The Department first and then Office of Management and Budget.

Dr. GLOSSER. The agency requested $14,932,000. The Department request was $9,743,000.

Mr. WHITTEN. Was that an increase over the previous year?

Dr. GLOSSER. Yes. From $12.8 million.

Mr. WHITTEN. With cattle ticks, what did you ask for in the Department?

Ms. JO ANN SMITH. The agency requested $6.5 million.

Mr. WHITTEN. That is how much more than you have got to have?

Dr. GLOSSER. That included $2.1 million more for Puerto Rico.

Mr. WHITTEN. I will ask you, tell us how much it is above what——

GRASSHOPPER

Dr. GLOSSER. The agency request for grasshoppers was the same as the Department and OMB request. If I might explain, in the grasshopper program, we are in the years of low incidence of the pest. The memorandum of understanding with the Department of Interior to treat this pest is now in place and we have sufficient money to address the worst case projected for grasshoppers next year.

Mr. WHITTEN. Don't let the cases spread over the worst area—the worst areas, which leaves the others to spread.

Dr. GLOSSER. We feel we can address——

Mr. WHITTEN. Address—that can mean a lot of things. What do you mean by address, point your finger at it?

Dr. GLOSSER. Reduce the threat of spread of grasshoppers into high impact areas.

Mr. WHITTEN. You are going to leave the threat—how much more money did you ask to reduce it instead of getting rid of it?

Dr. GLOSSER. What we asked for is reflected in the numbers that you have.

Mr. WHITTEN. You read the papers; don't you?

Dr. GLOSSER. Yes, sir, I do.

Mr. WHITTEN. Our information is that the Department has looked at the grasshopper situation and issued a press release. It says the following: "Grasshopper invasion feared in Northern Plains. Nearly 60 years after swarms of grasshoppers and locusts devastated the Great Plains, North Dakota scientists fear another invasion this spring. Surveys of soy bean fields showed 1700 pest eggs per square yard compared with a normal of 200."

You didn't read that?

Dr. GLOSSER. We did, sir.

Mr. WHITTEN. You can't get money if you don't ask for it.

Dr. GLOSSER. The budget request is directed towards the rangelands.

Mr. WHITTEN. The budget request is what you asked. Why didn't you request it?

Dr. GLOSSER. We feel the amount of money that is available in the budget for grasshopper is sufficient to treat the problem on rangeland.

Mr. WHITTEN. You just said the situation in North Dakota is bad but I reckon it is typical. Seventeen hundred pest eggs and the average is 200. And yet if you said you read it, it shows 1700 pest eggs per square yard and normal is 200 and you read it and didn't ask for more money. Why is that?

Dr. GLOSSER. The surveys are on the CRP lands.

Mr. WHITTEN. Did you ever hear of amending your request to Congress? I remember it from this end.

Have you made any requests to review these figures?

Dr. GLOSSER. No, we have not.

Mr. WHITTEN. How do you explain that?

Dr. GLOSSER. We have about $5 million from prior years to treat grasshopper.

Mr. WHITTEN. Prior years?

Dr. GLOSSER. Yes, in the no year account.

Mr. WHITTEN. Are you expecting a supplemental for $5 million?

Dr. GLOSSER. No, sir, we are not.

Mr. WHITTEN. If an infestation breaks out what are you going to do?

Dr. GLOSSER. Treat those rangeland areas that are infested.

Mr. WHITTEN. This says North Dakota. What are you doing there?

Dr. GLOSSER. We will treat traditional rangeland areas including Federal and State lands.

Mr. WHITTEN. You going to write them until we run out of funds?

Dr. GLOSSER. No, sir.

Mr. WHITTEN. Are you going to ignore them?

Dr. GLOSSER. We are working with the ASCS on this issue, on the CRP lands that have been heavily infested with grasshoppers.

APHIS BUDGET

Mr. WHITTEN. Go ahead for the record and tell us what you requested for each of these items, what you requested of the department, what the department requested of the budget, and where this figure came from here.

USER FEES

I notice user fees. That is a nice smooth word, but Congress has turned it down year after year. Have you got you hopes up high about getting these user fees into law? For quarantine inspection user fees, you want those to the tune of $74 million, import export work, $2 million, veterinary diagnostics—has anybody introduced a bill to change the law and charge the American people for that which is already financed?

Dr. **Glosser**. The user fee proposal is in the 1990 farm bill.

Mr. **Whitten**. It hasn't passed the committee or the House much less become the law. Are you following the committee—why do you think Congress turned it down for three or four or five or six years? What makes you think they will change their minds this time?

Dr. **Glosser**. We think in the case of user fees——

Mr. **Whitten**. You mean enough farmers have gone broke to where you don't have as many farmers to look at?

Dr. **Glosser**. No, sir.

Mr. **Whitten**. Our records show 300,000 farmers went bankrupt. Land doesn't necessarily remain free of its problems.

Dr. **Glosser**. That is correct, sir. We feel that the user fee is a very warranted request because the two sister agencies with port-of-entry inspection programs—Immigration and Customs--have user fees already.

Mr. **Whitten**. Nobody is treated like the American farmer. Every day or two we read where the United States is going to take care of some other country. In this country you have raised minimum wages to take care of labor. The public pays for that and you had a program whereby the farmer got his money from those who bought his product for 48 years. Now the program is to reduce the price support to less than what it costs to produce and he has to look for a check from the government.

I know the cattle business. They claim they never have had a price support system. They did. It was just in the name of corn and feed. You agree with that; don't you?

Dr. **Glosser**. Yes. Sir, I do.

Mr. **Whitten**. It is not funny but it is accurate. Put this information in the record. I realize what you are up against, but it doesn't seem that the public realizes what it is up against. You ask to cut these programs here, pests are damaging to say the least, destructive to say the most. You ask to cut the money. Where is the money going? Some is going to increase money for the Nation's colleges where they don't even have to report to Congress on how they use it.

PSEUDORABIES

Mr. **Whitten**. Last year the Congress provided an increase of over $6 million to the brucellosis program and a smaller increase to the pseudorabies program. Several state veterinarians have been in contact with the Committee with concerns that there is no increase in the state part of the funds. It is our understanding that what has happened is that more activities are funded through the central warehousing and, therefore, the cost to the states is much less. For the record, please provide us some details and comparisons between last year and this year and, in particular, what activities or products states will get from central warehousing this year that they did not last year.

Dr. **Glosser**. Some States did not participate in the central warehousing system until mid-fiscal year—1989, particularly several brucellosis high-incidence States—Texas, Oklahoma, and Florida. In fiscal year 1989, the Veterinary Services allocation for the central warehouse was $3.3 million. However, actual spending at the end of the year totalled $4.6 million. The fiscal year 1990 allocation is $4.7 million. These funds directly support field activities. Thus in fiscal year 1990, all State allocations now reflect the fact that these items no longer need to be purchased locally. Items distributed through the warehouse include animal identification tags, glue, tagging pliers, and protective clothing.

WITCHWEED

Mr. WHITTEN. Last year during our hearings, you testified that there were some significant problems with the witchweed program—problems dealing with the conservation reserve and contractor performance. Please bring us up to date on how fiscal year 1989 went and your plans for fiscal years 1990 and 1991.

Dr. GLOSSER. In fiscal year 1989, 13,204 acres were released from quarantine. New infestations were found on 888 acres and 1,455 already released acres were found reinfested. The net acres released in the program totaled 10,861. The significant problems faced in fiscal year 1988 were partially solved in fiscal year 1989. The conservation reserve problem has been resolved at the local level. Through a waiver with the local government, we were able to apply treatments on conservation reserve land. Our witchweed personnel are still having difficulties surveying the conservation reserve lands for witchweed. Since no host plants are grown on this land, witchweed cannot germinate and therefore does not produce the distinguishable bright red flower.

There has also been a change in the spraying contract provision. Formerly, contractors were assessed penalties for performing unsatisfactorily. Now, the contracts require contractors to retreat acres at their own expense if they were not treated satisfactorily. This change in the contract provisions improved the quality of the contractors' performance in fiscal year 1989. For 1990, the program plans to release 22,000 acres from quarantine and in fiscal year 1991, 18,000 acres are scheduled for release for quarantine. We will also continue to treat conservation range land and require contractors to respray poorly done fields at their expense.

VETERINARY DIAGNOSTIC[illegible]

Mr. WHITTEN. We know the APHIS provides training for international students in the area of veterinary diagnostics. In fiscal year 1990, you propose to provide approximately 600 days of training. Are these students used to enforce United States APHIS activities or is the training proposed to assist them in their own government's animal and plant inspection services? Is the cost reimbursed to APHIS?

Dr. GLOSSER. The training we provide to international students assists their own government's animal and plant inspection services and furthers APHIS program objectives. Most of this training deals with reagent production and other diagnostic techniques and is of a short term nature. Our National Veterinary Service Laboratories often provide diagnostic reagents to foreign countries in response to requests from our International Services and Veterinary Services programs. The training we provide enables the country to prepare these reagents themselves. It also contributes to the control and eradication of diseases of special interest to the United States. APHIS also benefits through the increased proficiency of the laboratories from which these trainees originated. The training leads to more reliable testing of animals for importation into the United States. This increased reliability facilitates international trade of livestock and livestock products for the participating country.

Generally speaking, APHIS is not reimbursed for providing training to international students. However, training costs for labor and supplies might be reimbursed in isolated cases where training is long term in nature—more than 6 months. In the past, when APHIS has provided long term training to international students, APHIS has been reimbursed through agreements with OICD and the country sending the student. We have not provided training of this type for several years.

LLAMA IMPORTATION

Mr. **Whitten**. During fiscal year 1989 the Office of the Inspector General issued an audit concerning llama importation activities. For the record, please provide the IG's recommendations and your responses to those.

Dr. **Glosser**. The Office of the Inspector General—OIG—has two recommendations. The first recommendation was that APHIS should timely develop and issue effective regulations for llama importations, to include an equitable permit approval process and specific timeframes for completing importations. The second recommendation was that APHIS should develop a system to ensure that complaints and inquiries are timely addressed.

In response to the first recommendation, APHIS has developed and published three proposed rules and procedures. OIG agrees with the planned corrective actions; however, before accepting them, requested that a timeframe be established for issuing the final regulations. One of the proposed rules has been published in final; for the remaining two we are evaluating public comments on the proposals.

In response to the second recommendation the Agency has developed a system whereby all correspondence is assigned a correspondence "ticket" with a due date for reply. Correspondence is monitored to assure that responses are provided within the designated timeframe. APHIS will address complaints and inquiries on a timely basis. The OIC agrees with this corrective action and accepts it as final.

Mr. **Whitten**. Also during fiscal year 1989, APHIS proposed rule changes concerning the importation of llamas. There are several concerns noted with the proposed rules. The first of which is the delineation that the country of Chile would be considered Foot-and-mouth disease free, thus changing the rules for quarantine for imported animals. It is our understanding that no other countries in South America are Foot-and-mouth disease free. What would prevent animals from crossing borders and intermingling?

Dr. GLOSSER. A number of factors prevent animals from crossing borders and intermingling. The first is geography. Chile is bounded on the west by the Pacific Ocean, the north by Peru, the northeast by Bolivia, and the east by Argentina. The border between Chile and Peru consists of a barren desert incapable of supporting livestock or wildlife of concern, thus posing little or no threat of Foot-and-mouth disease—FMD—introduction. The Andes mountain range forms the border between Chile and Argentina, and is an effective barrier to animal movement except in the southern part of Chile where the mountain range is much lower. The main threat of FMD introduction to Chile comes from southern Argentina.

The second factor affecting illegal animal movement is the surveillance and control activities undertaken by the Chilean Department of Agriculture, including a three-part system of checkpoints. The first part consists of border crossings with Bolivia and Peru. The border crossings are manned by federal police, customs agents, and Department of Agriculture personnel. The second part consists of eight checkpoints along roadways in the interior valley, and the third part includes five stations on the Pan American highway in western Chile. In order to pass a checkpoint, a livestock owner must have a transit permit.

Chile has conducted a camelid census yearly for the past 3 years. Under a new program, all llamas and alpacas will receive eartags and identification numbers. During annual inspections, any animal found without an eartag must have proof of source or it will be suspected of being illegally imported and consequently will be destroyed.

The final factor affecting FMD introduction into Chile is the preventive program Chile has set up to stop reintroduction from Argentina. Chile has established depopulation zones, reduced the number of livestock in the summer pasture areas, and improved surveillance of animals in summer pasture. Chile is working directly with Argentina to build corrals in Argentine summer pasture, to increase vaccination and improve reporting of outbreaks on the Argentine side, and to maintain a barrier of vaccinated animals on the Argentine side of the border. With the help of FAO, Chile expects to take 3 to 5 years to accomplish this joint effort.

Mr. WHITTEN. For the record, please provide general descriptions of the types of comments received on your proposed rule. What is the status of this proposed rule?

Dr. GLOSSER. We received 767 comments on the proposal. Of those, the vast majority, numbering 580, commented that even if Chile were declared free of FMD, importations should still occur through Harry S Truman Animal Import Center with a 90-day quarantine, sentinel animals, and appropriate testing. Comments in favor of declaring Chile FMD-free numbered 43 while those opposed numbered 130. The remaining commenters either requested more information or an extension of the comment period. We are currently preparing the final rule.

FOOT-AND-MOUTH DISEASE

Mr. WHITTEN. What would be the economic impacts to the United States if foot-and-mouth disease is reintroduced into the country?

Dr. GLOSSER. If FMD were reintroduced, immediately discovered, and quickly eradicated we estimate that the cost to American agriculture would be approximately $1 billion in 1989 dollars.

If it were not possible to quickly eradicate FMD and it became established in the United States, a 15 year loss of $22.5 billion—in 1989 dollars—could occur, according to E. McCauley's 1979 study "A Study of Potential Economic Impact of Foot-and-Mouth Disease in the U.S." This increase would be mainly in the form of increased consumer costs for animal products. Estimated consumer price increases due to reduced beef supplies would be 12 percent in the first year, 15 percent the following year, and smaller increases in subsequent years. Prices for pork, lamb, and milk would also be affected. The loss of U.S. export markets would also add significantly to the economic impact.

Should FMD enter Panama or Central America, they would have proportionately comparable losses and the risk to U.S. livestock would be greatly increased.

HONEYBEE PESTS

Mr. WHITTEN. You have stated that part of the objective of the program was to retard the northward migration of the bee and then to develop techniques to manage the European honey bee in an Africanized area. Your budget request for fiscal year 1991 eliminates the Africanized honey bee program. During fiscal year 1990, we had $1,916,000 allocated for that program. How many people did you have working on the Africanized honey bee program and where have they been based? What has led you to the conclusion that there is no way to stop the impending progress of the Africanized honey bee?

Dr. GLOSSER. The Africanized Honey Bee program has 1 USDA Program Manager, located in Mexico City, 3 administrative support staff, 2 of which are located in Mexico City and one in Tapachula, and 141 field personnel. The field personnel, with the exception of 20 are distributed along the Gulf Coast in the State of Vera Cruz and Tamulipas, which borders with Texas. Twenty of the field personnel are located on the Pacific Coast.

In 1987, APHIS requested the release of $1.55 million from the Agency's contingency fund to support the continued implementation of the Integrated Plan for Control of the Africanized honeybee—AHB—at the Isthmus of Tehuantepec in southern Mexico. The Integrated Plan used ten complementary strategies, including all the management techniques available, to control the northward advance of the bee. In spite of this, the bee continued to advance northward. The original cooperative agreement however states that the goal of the program is to retard the spread of the AHB through Mexico and to help develop technologies to assist beekeepers in managing European bees in an Africanized environment. The Agricultural Research Service (ARS) and certain univerisity scientists have stated the program had delayed the United States arrival of

AHB by as much as 18 months. However, two pioneer swarms of AHB have been detected within 160 miles of the Texas-Mexico border.

Mr. Whitten. You have indicated that since you are asking for no funds for the Africanized honey bee program, you will improve your capability to provide adequate protection to the honey bee industry through the honey bee pest program. You have asked for an increase in that program of $140,000 for a total of approximately $491,000 during fiscal year 1991. It would appear that after spending close to $2 million a year for the Africanized bee program that a decrease down to approximately $491,000 would be an inadequate amount to continue to provide any broad assistance to solve the problem. Could you please provide some details on how an additional $140,000 to the honey bee pest program can in anyway provide full support to the honey bee industry and the Nation, as a whole, concerning the Africanized honey bee problem?

Dr. Glosser. An increase of $140,000 from fiscal year 1990 will enable APHIS to provide additional assistance to the National Plant Board and Apiary Inspectors of America, which are under the umbrella of the National Association of State Departments of Agriculture, to coordinate the development of a national honeybee certification program that establishes uniform standards for interstate movement. APHIS would also provide additional support to States in dealing with current honeybee pests and AHB once it reaches the United States.

Mr. Chairman on January 17, 1990, the Secretary signed a Departmental regulation which sets the USDA policy on AHB. This policy gives general guidance to USDA agencies in developing their own policies. It emphasizes that the USDA will promote keeping honeybees of desirable stock through research, education, information and technology transfer. It also states that the USDA will promote and facilitate cooperation among public agencies, international organizations, and individuals in planning and implementing programs to mitigate the undesirable characteristics of the AHB while minimizing the duplication and overlap of roles in reaching departmental goals. USDA will disseminate information and educate the general public on AHB.

AGRICULTURAL QUARANTINE INSPECTION

Mr. Whitten. The last couple of years the Committee has provided additional funds and direction to the Agricultural Quarantine Inspection program by insisting on the purchase of several specific X-ray machines. This year you propose an increase of over $7 million to the quarantine program and have indicated that it will be used to expand usage to detector dogs and X-ray machines. Of the total amount in fiscal years 1989 and 1990 available for the program, how much was spent for purchasing additional X-ray machines and how much is proposed for fiscal year 1991?

Dr. Glosser. The total amount spent on additional X-ray machines in fiscal year 1989 was $1.5 million. Four X-ray systems have been delivered this year and 3 others are scheduled to be purchased but have been put on hold. The purchasing of X-ray equipment has been put on hold in order to cover salary costs. As you know, our Agency will have to absorb the 3.6 percent pay cost raise and the Gramm-Rudman-Hollings sequestration of 1.4 percent. The agricultural quarantine inspection—AQI—activities are extremely salary intensive. Since maintaining adequate staffing levels is critical for providing sufficient coverage to U.S. agriculture, major purchases such as X-ray systems have been delayed. If funds are available, the remaining 3 systems will be ordered by the third or fourth quarter of fiscal year 1990. In fiscal year 1991, APHIS is anticipating spending between $300,000 and $600,000 for X-ray systems. New X-ray systems will be purchased as needed.

Mr. **WHITTEN**. What do you consider to be the greatest domestic threat from overseas in relation to the Agricultural Quarantine Inspection program?

Dr. **GLOSSER**. The highest known risk to U.S. mainland agriculture is first class domestic mail. The AQI program has no legal authority to open suspected first class parcels in domestic mail. Yet numerous occurrences have proven that individuals knowingly ship prohibited fruits infested with extremely serious agricultural pests to the U.S. mainland from Hawaii and Puerto Rico Furthermore, experts speculate that the current fruit fly infestation in California which is costing APHIS $15 million to eradicate, could well have been caused by the introduction of fruit flies via the domestic mail.

FOOT-AND-MOUTH DISEASE

Mr. **WHITTEN**. You propose an increase of $851,000 for the foot-and-mouth disease—FMD—program and have indicated that this is necessary to provide more direct support to the Pan American Health Organization eradication effort. You have also stated that the FMD program in Mexico and Central America previously had been funded in the international services animal health line. Your request for that account shows an increase of approximately $96,000. Of your total request for foot-and-mouth disease, how much is the amount that normally would be considered under the international health line item, and how much of it is an increase to cover needs related to the Pan American Health Organization activities?

Dr. **GLOSSER**. Of the total fiscal year 1991 increase requested for FMD, $213,000 is for the Pan American Health Organization activities. The remainder of the increase, $638,000, is what is normally allocated for the FMD program in Mexico and Central America from the international animal health line item. As a result, International Services will be able to provide comprehensive coverage on animal and plant health matters on all continents, except Greenland. The Agency will be able to focus on establishing an office in Brussels and possibly Hong Kong.

Mr. **WHITTEN**. Do you know how much other countries contribute towards FMD to the Pan American Health Organization?

Dr. **GLOSSER**. The program budget for the Pan American Health Organization's Pan American Foot-and-Mouth Disease Center is $7,870,200. This is an allocation from the total Pan American Health Organization's operating budget. As host country, Brazil makes a yearly contribution of approximately $300,000 for personnel and facilities costs. Additionally, each country contributes towards FMD directly through their national eradication and surveillance programs.

MEDITERRANEAN FRUIT FLY

Mr. WHITTEN. In mid-February the Secretary declared an emergency concerning the Mediterranean fruit fly problem in California and, in so doing, proposes to transfer $15 million from the Commodity Credit Corporation to the APHIS Medfly program. For the record, would you provide a listing of the known domestic crops that could be damaged from a fruit fly infestation?

Dr. GLOSSER. Mediterranean fruit fly—Medfly—larvae are reported to feed on more than 200 plant species. The fruit is usually attacked but other plant parts, such as the blossom, are also subject to attack. A few of these plants are only attacked under laboratory conditions and some have been found infested with Medfly only once or twice. I will supply for the record a table which presents a list of U.S. crops that would most likely sustain economic damage from Medfly and would cause growers to change their pest management practices.

[The information follows:]

U.S. CROPS THAT WOULD MOST LIKELY SUSTAIN ECONOMIC DAMAGE FROM MEDFLY

Apple, apricot, avocado, Barbados cherry, boysenberries, carambola, cherry, date, grape, grapefruit, guava, fig, kiwifruit, kumquat, lemon, longan, loquat, lychee, papaya, passion fruit, pepper, prickly pear, mamey sapote, mango, nectarine, orange, peach, pear, persimmon, plum, prune, quince, raspberries, shaddock, sugar apple, sapodilla, tangerine, tangelo.

Mr. WHITTEN. Do you have any estimates on the total economic impact that a fruit fly infestation could have on these specific crops from both the change in exports and the damaged crops?

Dr. GLOSSER. I will provide a table which shows the estimated crop values for 15 of the host commodities I mentioned previously. Values for the minor crops such as guava, fig, kumquat, loguat, lychee, passion fruit, etc. are not available and are therefore omitted. We could also expect minor damage to tomatoes and olives. Also summarized within the table is the total loss in revenue due to export prohibition. In estimating the total economic impact of a fruit fly infestation, other factors such as the loss of crop value due to reduced quality, the cost of increased pesticide usage, and the cost of treatments for quarantine compliance should be considered as well.

[The table follows:]

[In thousands of dollars]

Commodity	Estimated crop value	Commodity losses due to export prohibition	Estimated crop damage from medfly infest [1]
Apple	$94,788	$166	$28,436
Apricot	28,613	N/A	8,884
Avocado	208,408	6,773	62,522
Date	17,871	N/A	5,345
Kiwifruit	22,989	4,957	6,897
Lemon	204,854	82,018	61,456
Mango	5,950	N/A	7,785

[In thousands of dollars]

Commodity	Estimated crop value	Commodity losses due to export prohibition	Estimated crop damage from medfly infest[1]
Nectarine	78,861	510	23,658
Plum and prune	102,661	53	30,798
Orange	1,701,479	78,548	510,443
Grapefruit	449,445	95,946	134,833
Tangelo	32,687	N/A	9,806
Tangerine	78,197	125	23,459
Grape	1,248,983	6,712	374,695
Peach	282,158	990	84,647
Pear	74,589	36	23,577
Total	4,633,533	276,834	1,397,241

[1] These estimates assume no Medfly treatment program.

Mr. WHITTEN. If the United States were to become a known Mediterranean fruit fly country, what would happen to vegetable and citrus crop exports? Do you know which countries now have a ban on exports from Medfly countries?

Dr. GLOSSER. Exports of U.S. products to many countries would be affected to various degrees with the establishment of Medfly in the U.S. This would range from additional certification, to quarantine treatment such as cold treatment and/or fumigation, to prohibition. It is difficult to predict how specific countries will react, or how often they may change their regulations.

The countries which now have a ban on exports from Medfly counties are: Japan, South Korea, South Africa, Dominican Republic, Australia, Taiwan, Philippines, China, and some of the Caribbean Islands.

Mr. WHITTEN. In January of this year APHIS dedicated the Waimanalo Sterile Fruit Fly Rearing Facility in Hawaii. What is the annual operating cost of this facility to produce 50 million sterile flies per week for test eradication efforts and what would be the annual operating cost of the facility if it were at full operating capacity.

Dr. GLOSSER. APHIS' operating costs for the Waimanalo Sterile Fruit Fly Rearing Facility for fiscal year 1990 will be about $1.6 million, which covers minimal production levels of 50 million sterile flies per week. The annual cost to APHIS to produce an additional 50 million sterile flies per week for test eradication efforts is $7,800 per million. To maintain full production of 500 million sterile flies per week, an additional $2 million per year, plus equipment valued at $1.5 million, would be needed. The facility's operating costs for one year at full production would be $3.5 million.

Mr. WHITTEN. The California outbreak also is concerned with the Oriental fruit fly. Is the Waimanalo facility in Hawaii capable of producing sterile flies to be used in the eradication efforts in California?

Dr. GLOSSER. The most current technology used to eradicate the oriental fruit fly is the method of male annihilation. This method involves spot treatments of pesticide mixed with an attractant and a protein substance placed on telephone poles, fence posts, and areas out of reach of humans, dogs, and cats. The substance at-tracts the male oriental fruit fly and kills it upon feeding. Research indicates that sterile fly releases can be be used to eradicate the oriental fly. However, currently there is no facility capable of producing these type of flies. In order for the Waimanalo facility to produce sterile oriental fruit flies it would be necessary to discontinue the rearing of sterile Medflies.

The Waimanalo facility came about in response to the need for a source of sterile fruit flies to battle occassional outbreaks in the continental United States and to furnish flies for a possible eradication program in Hawaii. Currently the facility is just coming on line and as expected will require additional work. When fully operational it is expected that this facility will be able to provide sterile Medflies to be used in the eradication efforts going on in California. However, it is also expected that additional sterile flies will be needed and shipped from the joint APHIS-Mexico sterile fly rearing facility in Metepa, Tapachula, Mexico.

Mr. WHITTEN. It is our understanding that the Sterile Fruit Fly Facility in Hawaii, shortly after beginning operations, broke down. Describe for us what the problems are and what kind of time frame you expect to see the facility back in operation.

Dr. GLOSSER. During the initial testing of the Waimanalo facility in Hawaii, it was discovered that the climate control equipment was not meeting temperature and humidity requirements. This is not an unusual occurence for insect rearing operations, which require critical environmental conditions. We are however, currently working with the contractor to correct these problems. In the meantime, we have made temporary modifications that will allow us to meet our production schedules. We plan to start delivery of 100 million sterile flies per week to the California emergency beginning the second week of April.

Mr. WHITTEN. Are there other sterile fruit fly rearing facilities and are they at full capacity?

Dr. GLOSSER. There are three additional Medfly sterile fruit fly rearing facilities. One is located in Metapa, Chiapas, Mexico which produces an average of 450 million sterile flies per week for the Moscamed program. A second one is located in Guatemala which produces an average of 115 million sterile flies per week for the California program. The other facility is a California facility located in Hawaii which produces approximately 100 million sterile flies per week. Only the facility in Hawaii is operating at full capacity. The other two facilities are not producing at full capacity. Renovations to these facilities would be needed before they could attain production at full capacity.

There is also a modern sterile fly rearing facility in Mission, Texas which only produces sterile Mexflies for the Mexican fruit fly program.

MEXICAN FRUIT FLY

Mr. WHITTEN. In fiscal year 1991 you propose an increase to the Mexican fruit fly program. For the record, describe the efforts of this program. Is it strictly a U.S. based operation and a prevention effort along the border or are activities also ongoing in Mexico?

Dr. GLOSSER. The Mexican fruit fly—Mexfly—program has both an international and a domestic component. The domestic component of the Mexican fruit fly program is carried out in the Lower Rio Grande Valley in southern Texas. It's goal is to prevent the Mexfly from becoming established in other citrus growing areas of the United States. As part of its program, the Agency disperses sterile flies, applies bait and treats fruit when necessary. In addition to the program in Texas, the Agency conducts trapping in Arizona, California, Florida, Louisiana, and New Mexico.

The international component of the Mexfly program consists primarily of cooperating with Mexico in delimiting surveys and sterile fly releases along the United States/Mexico border in order to maintain a sterile fly barrier to protect California. The Agency also provides oversight and supervision of a regulatory program in Mexico by monitoring the treatment and certification of host materials destined for the United States, or into the designated areas of Sonora, Mexico.

Mexico and the U.S. are currently reviewing the feasibility of expanding the pest exclusion zone in Northern Mexico. This zone would provide additional exclusion activities not only against Mexfly but other plant and animal pests and diseases of concern to the United States.

SCREWWORM ERADICATION

Mr. WHITTEN. Inflation in the country of Mexico has been most severe in the last several years, This fiscal year you are requesting an increase of almost $1.5 million for the screwworm program. Over the years, the screwworm program has been described as one of the most successful eradication efforts related to agriculture. For the record, would you provide a history of the program in terms of seriousness of the problem and beginnings of the eradication effort? Include within that the economic savings to the United States cattle industy and others.

Dr. GLOSSER. I will provide a chronological history of the APHIS screwworm program for the record.

[The information follows:]

1935—ARS receives funds for screwworm control and research investigations.

1951—The first field test of the screwworm sterile male technique is performed in Sanibel, FL.

1954—Screwworm is eradicated from Curacao using flies reared in Florida.

1955-57—Screwworm rearing facility is built at Bithlo, FL.

1959—Southeastern screwworm eradication program is completed.

1962—Congress matches the contribution of Texas and Texas cattlemen to begin an eradication program in Texas. A production facility is constructed, which allows the initiation of the Southwestern eradication program.

1966—USDA declares the U.S. screwworm free and assumes responsibility for maintaining a barrier zone along the U.S.-Mexico border.

1972—An international agreement is signed establishing the Joint Mexico-U.S. Screwworm Eradication Commission.

1975—Screwworm is eradicated from Puerto Rico.

1976—A new screwworm-rearing facility is opened in Mexico.

1981—The Texas rearing facility is closed.

1984—Screwworm is eradicated north and west of the 93rd meridian.

1986—The 1972 agreement is amended to permit eradication beyond the 93rd meridian. The program adopts the goal of eradication to the Isthmus of Panama.

1988—Eradication is initiated in Guatemala.

1989—Eradication is initiated in Belize.

From 1957 to 1959, direct losses were $71 million in 1984 dollars. In 1962, direct losses were $359 million in 1984 dollars. In 1987, the last year data is available, a benefit/cost ratio of 11.51 was estimated for the United States. No studies have been conducted regarding losses since 1987.

Mr. WHITTEN. For years there has been discussion of moving the screwworm down to the Isthmus of Panama. What has taken place with those discussions and are discussions currently underway with other Central American countries? Are these countries willing to commit funds to the program?

Dr. GLOSSER. There are no current discussions underway with Central American countries. Currently one-third of Guatemala, one-half of Belize and the Yucatan peninsula in Mexico are being treated with sterile insects. In 1989 the governments of El Salvador and Honduras were approached regarding extension of the program into those countries. Public Law 480 funds are currently available; however, no agreements are in place which would be a prerequisite to the use of those funds. So far, APHIS has not received any funding commitments as a result of these negotiations. Periodic discussions on this subject are expected to continue—particularly as the program progresses.

Mr. WHITTEN. What would the APHIS cost be in controlling the screwworm down to the Isthmus?

Dr. GLOSSER. The cost to eradicate screwworm to the Isthmus of Panama by 1996 would be an estimated $328.7 million, which includes $30-$35 million for a new rearing facility.

Mr. WHITTEN. If the screwworm were eradicated to the Isthmus, what would be your best estimate for annual operating costs to control the screwworm?

Dr. GLOSSER. The annual operating cost in 1996 would be $20 million. Net costs would increase by 8 percent per year, based on averaged annual inflation rates of 4 percent in the United States and 12 percent in Central America.

ANIMAL DISEASE DETECTION

Mr. WHITTEN. One of the most significant increases to a program under APHIS proposed for fiscal year 1991 is in the animal disease detection program. Is the $3,683,000 increase proposed related to the President's Food Safety Initiative? Are there other costs in APHIS that are considered part of the Food Safety Initiative?

Dr. GLOSSER. The proposed increase in the animal disease detection program continues the commitment of APHIS to enhance and improve the agency's preparedness for new and emerging animal health issues, both exotic disease incursions and endemic problems which affect animal health, productivity, and profitability. These proposed increases will complement the President's Food Safety Initiative although they are not specifically related.

APHIS has no programs directly related to the President's Food Safety Initiative. Certain APHIS programs, however, complement food-safety by controlling pest or disease problems on the farm. For example, APHIS' current program activities affect food-safety through protecting meat and poultry from Salmonella and other microbial contamination; testing for chemical residues in meat and poultry products; monitoring pesticide residues in plant-food commodities; and through regulating biotechnological applications in plants and animals. Our biocontrol program reduces the need for pesticide use to combat certain pest and disease problems.

Mr. WHITTEN. You have indicated that one of the things that you would do with the increase is establish a National Center for Epidemiology and Animal Health. Exactly where would this center be located and how many personnel and dollars would be allocated to it? What would be the specific function of the center.

Dr. GLOSSER. The nucleus for the Center exists at the present time in the Veterinary Services Animal Health Information unit located in Fort Collins, Colorado. Specific numbers of personnel to be added to the Center for stationing at Fort Collins or in the field have not yet been determined, although key position types are certain to include veterinary epidemiologists, agricultural economists, statisticians, and computer specialists. An Agency task group has been formed to develop a detailed action plan for the Center by July 1, 1990. Once that group's work is completed, I will provide the Committee with additional details.

The Center would significantly enhance APHIS' ability to assess animal health and productivity in order to detect endemic and exotic diseases, measure their impact, and evaluate alternative prevention, control, and eradication strategies. Center initiatives would include the investigation of food quality and safety issues such as Salmonella enteritidis and antibiotic residues, as well as animal health and productivity concerns of agricultural producers, such as the impacts of management and disease on production efficiency. Analysis of data concerning the distribution and determinants of disease would facilitate field investigations of endemic disease problems and impaired productivity. Technical expertise in field disease investigation and analysis, would be available to support regional emergencies as well as ongoing health problems. Collaboration with sister agencies involved in animal and human health issues would be maximized. Existing and new data would be compiled and analyzed for the purposes of disease modeling, risk assessment, forecasting, and program planning. The tools of epidemiology, biostatistics, and economics would be stressed to improve the delivery and responsiveness of APHIS' veterinary health problems.

Mr. WHITTEN. You have indicated that 19 states will be participating during fiscal year 1990 in the National Animal Health Monitoring System—NAHMS. Please list these states and also those that you expect to join up during fiscal year 1991.

Dr. GLOSSER. The 19 States that will participate in NAHMS in 1990 include Alabama, California, Colorado, Georgia, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, Nebraska, New York, North Carolina, Ohio, Oregon, Pennsylvania, Tennessee, Virginia, and Wisconsin.

In fiscal year 1991, we will include approximately 9 additional States in the national dairy study; Connecticut, Florida, Maine, Massachusetts, New Hampshire, Idaho, Rhode Island, Vermont, and Washington. This will bring the total number participating in NAHMS to 28. Additional States will be testing forms and procedures for the national beef and poultry surveys scheduled to begin in FY 1992.

Mr. WHITTEN. Under the NAHMS system, does APHIS provide funds to States for their participation?

Dr. GLOSSER. Yes, we do. The NAHMS program is administered through State-Federal-industry cooperation. Funds are provided to cover the Federal and State workload associated with NAHMS implementation in the 19 States in which the program is operational.

PEST DETECTION

Mr. WHITTEN. The pest detection program for fiscal year 1990 has a requested increase of approximately $326,000. The increase would go for cooperative surveys on a variety of targeted pests. Please explain what agencies or countries are cooperating. Are they assisting in funding these surveys?

Dr. GLOSSER. The increase would go to enhance APHIS' exclusion activities in Mexico and the Caribbean to protect the agricultural resources of the United States. This program would provide an extension of the pest detection network to provide the Agency with sufficient response time to address outbreaks before they reach the U.S.

Currently, APHIS participates with Mexico, a number of Caribbean countries such as Grenada, Barbados, Bahamas and St. Vincent; and Chile and Surinam in South America. Besides receiving Agency support, the U.S Agency for International Development, the cooperating country and international agencies such as Food and Agriculture Organization provide funds and support for these activities.

Mr. WHITTEN. You have indicated that as a result of earlier Pathway Studies by APHIS in 1988, certain monitoring methods for 13 exotic pests being tracked by the pest detection program are now cheaper. What are these 13 exotic pests and briefly describe the difference in the monitoring methods.

Dr. GLOSSER. I will provide both the common and scientific names of the 13 pests.

[The information follows:]

Common name	Scientific name
Summer Fruit Tortrix	Adoxophyes orana.
Silver Y Moth	Autographa gamma.
Maize Borer	Chilo partellus.
Asiatic Rice Borer	Chilo suppressalis.
European Grape Berry Moth	Clysia (=Eupoecilia) ambiguella.
False Codling Moth	Cryptophlebia leucotreta.
Plum Fruit Moth	Cydia funebrana.
Light Brown Apple Moth	Epiphyas postvitana.
European Grapevine Moth	Lobesia botrana.
Cabbage Moth	Mamestra brassicae.
European Cherry Fruit Fly	Rhagoletis cerasi.
Egyptian Cotton Leafworm	Spodoptera litura.

The pathway studies have given us better information on the areas where there is the greatest probability of trapping the pests. Prior to the studies, we placed traps in regular production orchards. Now we place them in abandoned orchards near international seaport and airport locations. We have found this to be much more effective.

ANIMAL DAMAGE CONTROL

Mr. Whitten. In December 1985, the animal damage control activities of the Fish and Wildlife Service were transferred to APHIS. During fiscal year 1986 APHIS had indicated that sometime in the future it would need to replace most of the vehicles transferred from the Fish and Wildlife Service and all radio equipment. Each year since then, significant increases in operational components of ADC program have been provided. Have all of the former Fish and Wildlife Service radios and major equipment been replaced? Please provide a replacement schedule and approximate cost for out years.

Dr. Glosser. No, only a small portion of the vehicles, radio and major equipment have been replaced since 1985. Our appropriation has increased each year, but the increases were used to absorb additional pay cost and increased operating costs caused by inflation.

I will provide a specific table showing replacement schedules for vehicles, radios and other major equipment.

[The information follows:]

Vehicles.—The average age of vehicles in the current fleet is four years, and each vehicle has an average 96,000 miles. We are currently planning to replace 30% of the vehicles identified for replacement in 1990.

VEHICLE REPLACEMENT SCHEDULE

	Quantity	Cost
Fiscal year:		
1990	93	$1,158,780
1991	52	647,920
1992	39	485,940
1993	48	590,080
1994	20	249,200

Radios.—Since the transfer, radio plans have been completed for each state. To implement the new system, approximately $2 million is needed.

Other major equipment.—Over 90 percent of ADC's all-terrain-vehicles (ATVs), snowmobiles, travel and stock trailers, and special utility type trailers were purchased prior to FY 1985. Many were purchased in the early 1970's and desperately need replacement. Listed below are the estimated replacement costs by category.

	Quantity	Cost
ATV's	192	$748,800
Horse trailers	108	324,000
Travel/camp trailers	92	460,000
Aircraft repair/replacement		525,930
Miscellaneous equipment		105,000
Total fiscal year 1990 need		2,163,730

Mr. Whitten. You have requested an increase of $1.4 million for the animal damage control operations "due to increasing environmental sensitivity." How would additional funds be used to address the environmental sensitivity issue?

Dr. GLOSSER. The cost of supplies, materials, and equipment necessary to carry out animal damage control work continues to increase because their use is becoming more environmentally sensitive. Increasing sensitivity by the public, State and local governments requires that equipment such as traps be checked more often. As an example, California now requires that traps be checked daily instead of twice weekly. In addition, the pressure to be very species-specific, and reduce, to the maximum extent possible, taking of non-target species, have also increased the cost of control work.

Additional funds are needed to meet critical data needs demonstrating the extent and distribution of wildlife damage, effectiveness of control tools, and the significant contributions, benefits, and environmental impacts of wildlife damage control. These data needs can be met through an expanded and updated ADC information system in conjunction with other surveys, studies, and systems supported by private enterprise, universities, and government agencies. This information is critical to further public understanding and acceptance of ADC work, and to aid in making effective program management decisions.

Increasing environmental sensitivity also has led to increased costs and restrictions associated with the registration and use of pesticides. Without additional funding to offset these increased costs and restrictions, ADC's ability to deliver an effective level of service will be reduced.

Mr. WHITTEN. It is our understanding that APHIS has been dissatisfied with the research results related to the taste aversion research of the Animal Damage Control Unit. Please bring us up to date on the status of that research.

Dr. GLOSSER. APHIS negotiated a contract with Arizona State University—ASU—to conduct taste aversion research as a method of controlling predator damage to livestock. In this contract, we required approval of all project literature or information before it was disseminated by the University investigator to the public. Because this requirement was not met, APHIS has notified ASU that it would terminate the contract. We spent approximately $100,000 in FY 1989 and $60,000 in FY 1990 to evaluate taste aversion as a predator control tool. These studies were conducted in Texas, Arizona, and California.

Mr. WHITTEN. For the record, please provide a listing of all states in which ADC work is ongoing and the cost sharing amounts provided, by state.

[The information follows:]

The amount of cost-sharing (cooperative funds) received by State in fiscal year 1989 is as follows:

	Cooperative funding
Arizona	$240,439
Arkansas	0
Alabama	0
California	2,085,566
Colorado	234,459
Florida	12,000
Georgia	7,024
Idaho	280,108
Illinois	0

	Cooperative funding
Indiana	0
Kentucky	14,000
Louisiana	8,500
Maine	0
Maryland/Del/DC	0
Massachusetts/CT/RI	0
Michigan	28,750
Minnesota	0
Mississippi	18,847
Missouri/IA	0
Montana	454,230
Nebraska	110,497
Nevada	505,662
New Hampshire/VT	41,696
New Jersey	35,000
New Mexico	641,135
New York	4,000
North Carolina	0
North Dakota	364,414
Ohio	40,000
Oklahoma	595,057
Oregon	697,547
Pennsylvania	0
South Carolina	0
Tennessee	101,614
Texas	3,583,805
Utah	732,839
Virginia	0
Washington/HI	254,954
West Virginia	0
Wisconsin	251,715
Wyoming	537,886
Total	11,881,744

Mr. WHITTEN. For the record, please provide a detailed description or status report of each of the following: the beaver damage control program conducted in Wisconsin; the blackbird control program in North Dakota and South Dakota; the beaver damage control program in Mississippi; the cooperative agreement with the State of Maine Department of Fisheries; the guarding dog program; the Delta States animal damage control program; the New England deer damage control project; the sunflower research program in North Dakota; and the Hawaii rodent control program.

[The information follows:]

1. The Wisconsin beaver damage control program is funded cooperatively by Federal dollars totaling $100,180 and State funds totaling $65,180. The Federal dollars include $35,000 provided by the U.S. Forest Service and $65,180 by ADC to match State cooperative funding. The Wisconsin program employs 13 persons. This represents an increase of 5 employees over FY 1988.

In FY 1988, Animal Damage Control conducted control programs on 16 streams totaling 137 miles of trout streams. In FY 1989, control programs were conducted on 47 trout streams totaling 482 miles. This provided a minimum of $388,000 in direct economic benefits to Wisconsin fisheries, and prevented a comparable amount in timber and road culvert losses.

2. The Blackbird Hazing Program in North Dakota began on August 14, 1989, and ended October 13, 1989. The North Dakota State Office received 598 requests for assistance, compared to 781 complaints received in FY 1988. This represents a 30% decrease in complaints. One reason for the decline is because there were approximately 200,000 less acres planted to sunflowers. The other reason appears to be because of the drought. In FY 1989, there were fewer wetland areas than last year, and as a result, the birds were heavily concentrated in areas where water was present causing excessive amounts of damage.

Damage estimates reported to the State Office in FY 1989 for sunflowers, was $2.1 million. These figures represent seed loss only and do not take into account planting costs, labor, and ammunition costs incurred by the growers while protecting their crops. Not all of the sunflower growers requested assistance.

In FY 1989 there were 12 fixed-wing aircraft, 10 full-time ADC Specialists and 6 temporary employees involved in the hazing program. In addition to the hazing program, pyrotechnics and propane cannons were loaned to the growers requesting additional assistance.

The FY 1990 Blackbird Hazing Program in North Dakota is tentatively scheduled to begin August 13th and run through October 12, 1990. Ten fixed-wing aircraft will be placed in operation in the eastern and central part of North Dakota. In addition to the aerial hazing operations, pyrotechnics, avitrol and DRC-1339 will also be provided to sunflower producers to alleviate blackbird damage.

Of the $368,600 allocated for the 1990 hazing program, $30,000 will be provided to South Dakota for work there. The balance will be utilized in North Dakota. Between 600-650 requests for assistance are estimated from sunflower producers this year. Early projections indicate that there may be slightly more acreage planted to sunflowers this year.

3. A cooperative agreement was signed February 1990 between the Mississippi Department of Agriculture and Animal Damage Control. Under the agreement, ADC will provide a beaver control program to landowners with beaver problems. Under the terms of the agreement ADC will provide $100,000 and cooperators will provide $229,000.

Eight positions have been developed to support the project. All eight positions will be fully functioning by March 25, 1990. In addition, equipment to support the project has been procured, including surplus vehicles for the initial year.

4. The cooperative agreement with the State of Maine Department of Fisheries is currently being negotiated. We expect it to be finalized shortly.

5. During fiscal years 1986 and 1987, 100 guarding dog pups were purchased and placed with 87 sheep producers in Idaho, Wyoming, Oregon, and Washington. As of February 1990, 38 of those dogs are dead. Ten were culled because of unsuitable behavior, and 28 died from various accidents or were lost. Sixty dogs are currently working on rangeland and pasture sheep operations in the four states and were rated on their performance as follows: 78% good, 12% fair, and 10% poor. All dogs rated good or fair were judged to have reduced coyote predation on sheep. Without exception, the 53 producers currently in the ADC dog program plan to continue using guarding dogs, and about one-half of the producers have either purchased or plan to purchase additional guarding dogs. Since the ADC dog program began, hundreds of producers throughout the U.S. and Canada have requested and received information from ADC about using guarding dogs for predation management.

6. The Delta States animal damage control program is a joint Animal Damage Control (ADC) and Science and Technology (S&T) project to compile information to better define the problems and to document loss to cormorant depredation on catfish production.

Animal Damage Control has completed preliminary food habitat data collection on fish eating birds and bait minnows. The data has been given to S&T to develop a final report.

In addition, we have completed several field trials of potential control techniques. In February 1990, we completed the first official cormorant roost survey for the Delta States.

APHIS has established a cooperative agreement with Mississippi State University to study roosting dynamics of cormorants in the Delta States. This research is directed toward the goal of reducing bird predation at aquaculture facilities. We are emphasizing the collection of objective scientific information on the distribution and magnitude of economic loss caused by cormorants at catfish ponds in the Delta. We are analyzing the status and movement of cormorant populations. As a part of this agreement, we evaluated roost dispersal and aerial harassment for effectiveness. We also surveyed Mississippi catfish growers. They estimated spending at least $1.5 million a year to harass birds. Aerial reconnaissance was assessed as a technique to estimate cormorant populations. We developed a technique for determining the number and size of catfish that cormorants take per minute. We also developed a similar technique for great blue herons.

7. We spent $150,000 in FY 1989 and will spend another $150,000 in FY 1990 to study deer control methods in the Northeastern States. Our project objectives are to evaluate the extent and nature of the impact of deer damage on nursery and landscaping industries; evaluate the efficacy of repellents for reducing deer browsing on apple trees; evaluate the cost benefits of using any one of 6 repellents to reduce

damage; develop cost estimates and economic thresholds for determining the amount of deer damage that justifies the installation of deer exclusion fences; and develop extension information such as pamphlets and brochures that would be appropriate for fruit growers and nursery and landscape operators.

8. DWRC has recently established a cooperative project with NDSU. Through this project, we conduct studies on the behavior and biology of blackbirds in relation to sunflower damage; aerial toxicants, repellents, and other techniques such as habitat manipulation as methods to reduce blackbird damage to sunflowers; and, studies on characteristics of resistance of sunflower hybrids to blackbird damage.

9. We spent approximately $240,000 in FY 1989 and will spend the same amount in FY 1990 to establish methods to control rat damage to sugarcane and macadamia nuts in Hawaii. When we identify a promising rodenticide, field trials will be conducted to evaluate efficacy and develop other registration data. We are continuing research activities to identify, evaluate, and register an effective rodenticide for controlling Norway rats in sugarcane fields and black rats in macadamia nut orchards. In FY 1990, our DWRC Hawaii Field Station will be conducting laboratory trials of a candidate rodenticide, Cholecalciferol, to evaluate efficacy for controlling these Norway rats.

BIOLOGICAL CONTROL

Mr. Whitten. You have indicated that increased funding for the biocontrol program would be used to partially expand initial steps towards completing the development and staffing of a National Biological Control Service Institute. Where is this institute located and what are the staffing and resources applied to it for fiscal years 1990 and 1991?

Dr. Glosser. Mr. Chairman, the institute's mission is to provide a central focus to promote, facilitate, and provide leadership for biological control. Its functions include developing an effective network of Federal, State, and private organizations committed to biological control; soliciting input from cooperating institutions in identifying potential biological cooperators and clients; collecting, analyzing, and disseminating general and technical information on biological control activities; expediting acquisition, development, and implementation of biological control agents; coordinating technical education and training programs; and integrating biological control with other pest management technologies.

No new facilities will be needed in fiscal year 1990 or 1991. The institute will be located at headquarters in Hyattsville, Maryland. The fiscal year 1990 budget contains $500,000 for the institute. This funding level provides for five staff-years, their support, and several cooperative programs. In fiscal year 1991, the budget proposal includes funds for maintaining five staff-years, full performance of the institute's mission, and enhancement of its cooperative programs.

LEAFY SPURGE

Mr. Whitten. Of the total amount proposed for the biocontrol program, how much of it is directed at the lefty spurge program? For the record, please describe all the activities related to the leafy spurge program, including the economic losses to producers.

Dr. Glosser. In fiscal year 1991, APHIS plans to direct $1.5 million to the leafy spurge program. Activities in the leafy spurge program will include mass production at our Mission, Texas, facility and release of parasites; continued foreign collection; quarantine screening; field trials conducted at our Bozeman facility; and the continued introduction of natural enemies. Our Mission facility is in the process of adding a quarantine facility, which will increase the Agency's ability to quickly introduce natural enemies. Presently, we have a cooperative agreement with an economist at North Dakota State University to determine the economic impact of leafy spurge on rangelands and wildlands. This report has not yet been completed but should determine the economic losses to producers caused by leafty spurge.

BOLL WEEVIL

Mr. **Whitten**. For each of the Boll Weevil programs, please provide funding levels for fiscal years 1989, 1990 and 1991.

Dr. **Glosser**. Yes, I would be pleased to do so.

[The information follows:]

BOLL WEEVIL

[In thousands of dollars]

	1989 (actual)	1990 (estimate)	1991 (estimate)
High plains	642	728	750
Southeastern	12,358	9,852	7,095
Southwestern	2,686	2,261	1,971
Total funding	15,686	12,841	9,816

Mr. **Whitten**. You have stated that because of mild winters, the Southeast eradication effort for the boll weevil program needed considerably more funds during fiscal year 1989 than had originally been planned. There was a 4-year eradication project developed for Georgia, Alabama and Northern Florida. How will your proposed decrease of funding for the boll weevil control program affect the 4-year plan? Will the $9,816,000 be enough to continue on schedule?

Dr. **Glosser**. Due to setbacks in 1989, we are 1 year behind on the 4-year plan, and the program will now take 5 years to complete. The $9.8 million budget request was formulated assuming that the variables which affect the cost of the program—weather, acreage, weevil populations—would be ideal. If conditions are right, it will be sufficient to keep us on the 5-year schedule.

Mr. **Whitten**. Please provide a table for the Southeast eradication efforts showing the timetable and resources necessary to complete the project according to the 4-year schedule.

[The information follows:]

EXPANDED SOUTHEAST BOLL WEEVIL ERADICATION PROGRAM

[In thousands of dollars]

	Fiscal year—					Total
	1987-88	1989	1990	1991	1992	
Cooperator	$19,874	[1] $24,521	$16,683	$15,498	$14,377	$90,953
USDA cost-shared	11,186	4,716	7,742	5,261	6,216	35,121
Non-cost-shared	6,812	1,442	2,110	1,834	2,092	14,290
Total USDA costs	17,998	6,158	9,852	7,095	8,308	49,411

EXPANDED SOUTHEAST BOLL WEEVIL ERADICATION PROGRAM—Continued

[In thousands of dollars]

	Fiscal year—					Total
	1987-88	1989	1990	1991	1992	
Total program	37,872	30,679	26,535	22,593	22,685	140,364

[1] Includes $6.2 million CCC advance and $5,064,000 APHIS advance to be repaid in fiscal years 1990-93.

Mr. **Whitten**. It is our understanding that producers participating in the program have already committed to $13.8 million in 1991. How much are industry and the states providing in the cost sharing of this program?

Dr. **Glosser**. We expect that industry and the States will provide $15.5 million in FY 1991 to the Southeast boll weevil program. The growers have agreed to provide 70 percent of the costs in this program.

Mr. **Whitten**. What are the economic benefits to date to the cotton farmer as a result of eradication efforts in the Eastern and Southeastern States?

Dr. **Glosser**. Based on a study published by the Economic Research Service in September 1989, farmers enjoyed an increased yield of approximately $34 per acre, a pesticide savings of approximately $30 acre, and a land value increase of approximately $14 per acre, for a total dollar benefit of $78 per acre. Additionally, the study pointed out that fewer applications of pesticides following eradication also benefit the environment.

BRUCELLOSIS

Mr. **Whitten**. It recently was reported that the cost of test kits for the brucellosis program increased significantly. Are there several companies that make test kits? Is APHIS able to obtain test kits at a competitive rate?

Dr. **Glosser**. No, only one company, the Idexx Corporation, currently produces PCFIA test kits. Price negotiations are currencly underway; an audit of the company's cost and pricing data was completed in December 1989.

CATTLE TICKS

Mr. **Whitten**. The Administration's budget request for fiscal year 1991 proposes to terminate the Food and Nutrition Service Block Grant for Puerto Rico and to transfer nutrition assistance for Puerto Rico to the Department of Health and Human Services—DHHS. In so doing, the cattle tick program in APHIS that was funded in conjunction with the FNS Block Grant would be terminated. If Congress were to concur with the transfer of the Block Grant to DHHS, what assurance do you have that they would not want to continue the cattle tick program in Puerto Rico through use of the Block Grant funds?

Dr. **Glosser**. If the block grant is transferred to DHHS, the Governor of Puerto Rico will have discretionary authority to spend the grant. The new block grant through DHHS is titled "Fiscal Assistance for Puerto Rico," and is intended as a broad-based, non-categorical pool of resources for low-income individuals. We have no assurance that the funds would be used to continue participation in the cattle tick program or if so, at what level.

Mr. WHITTEN. What would be additional cost to APHIS be in fiscal year 1991 if it were to continue the cattle tick eradication program in Puerto Rico?

Dr. GLOSSER. In order to fully fund the cattle tick program in Puerto Rico, approximately $14 million would be needed. That amount includes the funds formerly supplied through the FNS grant and the Commonwealth of Puerto Rico, as well as the funds supplied through APHIS. Funding needs could be met between APHIS and the Commonwealth in a mutually acceptable manner.

Mr. WHITTEN. Hurricane Hugo caused severe damage to the Caribbean basin. What impact did it have on the tick eradication program in Puerto Rico?

Dr. GLOSSER. The devastation of Hurricane Hugo seriously affected program activity causing lack of water, impassable roads, broken fences, and disrupted lives. Treatment cycles for over 2,000 herds will have to be started over. In addition, over 10,000 herds will have to be examined to ensure that they remain free of ticks. Those herds found to be infested will have to begin treatment activities anew.

Mr. WHITTEN. Because of the setback, is the eradication effort economically viable?

Dr. GLOSSER. While the setback has extended the program's timetable for eradication, a more formidable obstacle to achieving the goal of eradication is the current delineation of program authority between USDA, the Puerto Rico Department of Agriculture, and the Puerto Rico Department of Social Services. APHIS believes that unless USDA is given complete operational control of the program, the effort as presently structured is not economically viable and should be terminated.

CITRUS CANKER

Mr. WHITTEN. In fiscal year 1989 the APHIS Citrus Canker Committee completed a study that provided a cost-benefit ratio that indicated it would be economically beneficial for APHIS to supplement the citrus canker A-strain eradication program in Florida. For the record, please provide a copy of this study.

[CLERK'S NOTE.—The citrus canker report is too voluminous to reprint and is retained in committee files.]

Mr. WHITTEN. You have requested the establishment of a citrus canker line item for APHIS for fiscal year 1991. These funds would be used to share operational costs and costs of tree depopulation with the State of Florida. How much of your request would be used for operational costs and how much for tree depopulations?

Dr. GLOSSER. APHIS has not earmarked any funds in the citrus canker program specifically for tree depopulation. Most of the program costs stem from conducting surveys and enforcing interstate movement regulations. While we may share the cost of uprooting and burning infected trees, we do not intend to pay indemnities. This is the responsibility of the State of Florida.

Mr. WHITTEN. How much is the State of Florida providing in this program?

Dr. GLOSSER. The Florida Department of Agriculture plans to request $2.9 million from the State of Florida for citrus canker program activities in fiscal year 1991. In a separate budget request for fiscal year 1991, Florida plans to ask for more than $20 million to resolve pending lawsuits regarding citrus canker indemnities.

GRASSHOPPER AND MORMON CRICKET

Mr. WHITTEN. Your budget request for the grasshopper and Mormon cricket control program shows a significant decrease due to continued lower grasshopper populations and anticipation that adequate funds will be carried over from fiscal year 1990 to meet the need for control efforts. Recent media reports have indicated that surveys of soybean fields in the Great Plains area showed 1,700 pest eggs per square yard compared with the normal 200. If that is correct, the potential for monumental problems in the Great Plains area is great. If that population explosion occurs, what efforts will APHIS take to control the problem?

Dr. GLOSSER. We started fiscal year 1990 with $10.4 million in the grasshopper no-year fund. Our response to such a population explosion would be contingent upon the funds available. When possible, we fund 100 percent of the cost of treating Federal land when grasshoppers from that land are moving onto private land. If the States affected want to treat State land, APHIS will share the cost 50/50. The high numbers of eggs to which you are referring seem to be confined to non-cultivated land in areas bordering cultivated crops in North and South Dakota and Minnesota. If the weather does not kill the eggs or immature grasshoppers, a population explosion could occur. If so, we will respond to requests for cooperative programs in areas meeting our rangeland control criteria. We do not have authority to treat cropland.

Mr. WHITTEN. Are grasshopper control efforts cost-shared with states?

Dr. GLOSSER. This varies by State. APHIS pays 100 percent of the cost to treat Federal lands. If an individual State wants to treat State owned land, APHIS will share 50 percent of the cost with the State. APHIS will also pay one-third of the cost to treat private land. Some States will pay another third, with the land owner paying the remaining third. In States that do not share the cost to treat private land, the producer must pay two-thirds of the cost.

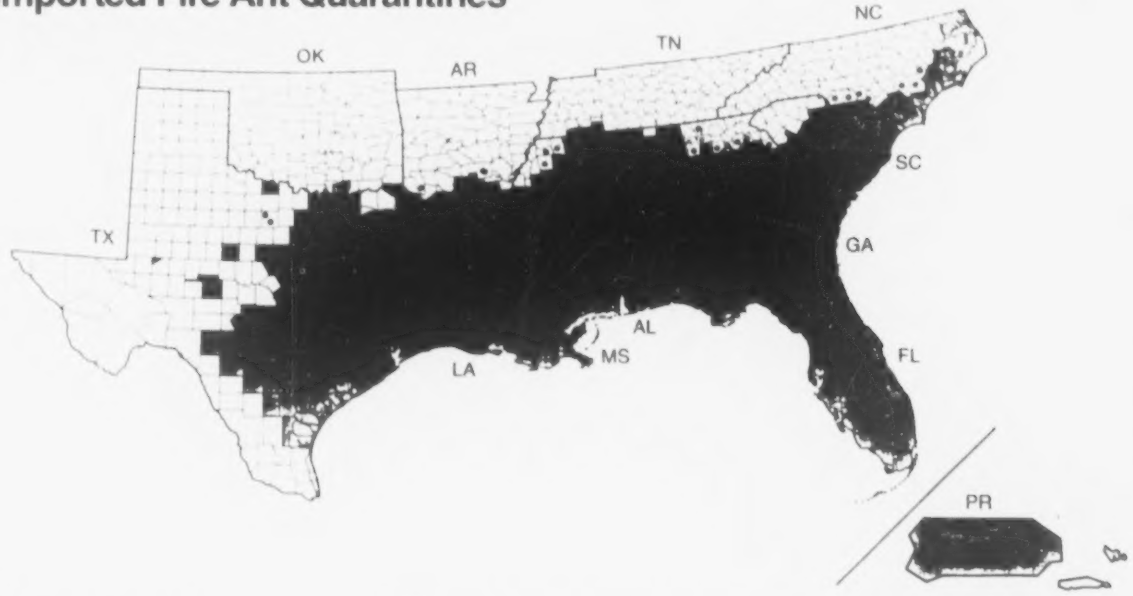
IMPORTED FIRE ANT

Mr. WHITTEN. For the record, please provide a listing of the States in which the imported fire ant currently is established.

Dr. GLOSSER. The imported fire ant is currently established in Louisiana, Florida, and Puerto Rico. They are also established in portions of Texas, Oklahoma, Arkansas, Tennessee, North Carolina, South Carolina, Georgia, Alabama, and Mississippi. I will provide for the record a map showing the affected portions of these States.

[The map follows:]

Imported Fire Ant Quarantines



Conditions of Movement

Counties entirely colored are completely regulated; counties partially colored are partially regulated.

▨ Areas Infested with Imported Fire Ants

Restrictions are imposed on the movement of regulated articles from Red areas into or through white areas.

Consult your State or Federal plant protection inspector or your county agent for assistance regarding exact areas under regulation and requirements for moving regulated articles. For detailed information see 7 CFR 301.81 for quarantine and regulations.

U.S. Department of Agriculture • Animal and Plant Health Inspection Service
Plant Protection and Quarantine Cooperating With Affected States

See reverse side for list of regulated articles

Revised July 1989

Mr. **Whitten**. One of the main problems with the imported fire ant program has been the lack of approved pesticides for agricultural use. What efforts has APHIS made to register pesticides for agricultural use?

Dr. **Glosser**. APHIS, in conjunction with ARS, has been searching for an efficient, effective, and environmentally acceptable fire ant control agent since 1958. Over 6,000 compounds have been tested thus far.

We are continuing our field trials on promising new control materials to fill the void left when the registration for Mirex was cancelled by the Environmental Protection Agency—EPA—in 1977. Among the materials which have gained EPA registration are Amdro, Affirm, Logic, and Prodrone. The use of these control agents is limited due to label restrictions. Agricultural applications are few because there is insufficient data on the effects they will have on the environment and food safety.

We are working with ARS and Maag Agrochemical Inc. to expand the registration of LOGIC to include potatoes, soybeans, pecans, hay, blueberries, and bearing citrus. LOGIC was recently labeled for use in non-bearing citrus.

ARS scientists have identified the trail and queen pheromones. This is a step towards development of a species specific bait.

Mr. **Whitten**. Are there any cooperative agreements currently underway concerning the imported fire ant program?

Dr. **Glosser**. There are no cooperative agreements for control or eradication at this time. APHIS maintains cooperative agreements for assistance in regulatory work with every infested State except South Carolina. APHIS is currently in the process of negotiating a similar cooperative agreement with South Carolina. We also have cooperative agreements with the States of California, Arizona, and New Mexico for assistance in survey and regulatory inspections.

MISCELLANEOUS PESTS AND DISEASES

Mr. **Whitten**. For the miscellaneous plant and animal disease and pest program, please provide a table breaking out the approximate amounts spent on each plant and animal disease or pest.

[The information follows:]

Fiscal year 1989 miscellaneous animal diseases

	Thousands
Scrapie	$1,251
Equine diseases	238
Bluetongue	125
Other	101
Total	1,715

Miscellaneous plant disease/pest

Japanese beetle	$111
Citrus canker	657
Corn cyst nematode	1
European larch canker	15
Khapra beetle	29
Africanized bees	34
White garden snail	305

Egyptian cottonworm	6
Total	1,158

SCRAPIE

Mr. WHITTEN. For the record, please provide a status report of the scrapie program.

[The information follows:]

In FY 1989 and FY 1990, we continued to review the scrapie eradication program in cooperation with industry representatives, producers, and State and Federal cooperators. Recommendations that came out of the review include discontinuing the bloodline program because it is not cost effective, exploring other program options, and funding increases for research and education. Because of new knowledge gained about scrapie, the concept of eradication is probably no longer feasible.

We solicited comments in the *Federal Register* in FY 1989 and, after studying the responses to the proposed changes, are considering the regulatory option of conducting a negotiated rulemaking in order to develop a program which meets animal health, industry, and State and Federal Governmental needs. The proposed process underwent third-party review, following which APHIS publisned a docket with a 30-day comment period announcing our intention to conduct negotiated rulemaking. Included in the docket was a list of the groups proposed for inclusion on the advisory committee. We expect the first negotiated rulemaking meeting to be held in May 1990.

APHIS continues to participate in the cooperative study between the Scrapie Investigation Center in Mission, Texas, and the International Sheep and Goat Institute in Logan, Utah, to determine whether scrapie is transmitted via the embryo. In addition, we are continuing to cooperate with ARS, National Institutes of Health, universities, and private research institutions in efforts to develop a preclinical diagnostic test for the disease. As a result of peer group review recommendations received during FY 1989, we have initiated studies in premise contamination and bioassay procedures as well as the effectiveness of rendering in killing the scrapie agent.

APHIS is currently pursuing the importation of germ plasm for sheep and goats, as there is no current importation of sheep from countries affected with scrapie. This restriction severely limits the available genetic pool. We are also promulgating a regulation to allow the importation of germ plasm from countries free of FMD but affected with scrapie.

During FY 1989, two bills mandating the eradication of scrapie were introduced in Congress. However, neither was successful and APHIS could not support the bills as proposed, for several reasons. First, the Secretary of Agriculture already possesses the necessary authority to carry out program activities and the bills would remove any discretionary authority currently vested in the Secretary as to program methods. Secondly, successful eradication is not possible without an established preclinical diagnostic test. Research funding needs to be increased in this area.

COMMON CRUPINA

Mr. WHITTEN. For the record, please describe the common crupina problem in the Northwest and its effects on agriculture.

[The information follows:]

Common crupina is an annual noxious weed that has invaded the Pacific Northwest, specifically in Washington, Oregon, and Idaho. Idaho has the largest infestation consisting of 28,000 acres. The infestation in Washington is estimated at 480 acres and is found mostly on private lands and U.S. Forest Service wilderness areas. Oregon's infestation is found all on private land and is close to 5,000 acres. The infestations in Washington and Oregon are considered isolated. Common crupina reduces forage for domestic livestock and wildlife by crowding out more desirable plants. The weed is found in hayfields, pastures, trails, hillsides, and along fences and property lines. The dispersion of common crupina is believed to be primarily through the movement of cattle, horses, humans, farming equipment, and gravel from gravel pits. If uncontrolled, crupina could severely decrease the quality of rangelands and croplands, and could be an economic problem in livestock and crop production throughout the Pacific Northwest.

Mr. WHITTEN. How much are the states providing in the eradication program for common crupina?

Dr. GLOSSER. In FY 1989, the State of Washington provided $8,000 to initiate treatments for common crupina. Oregon provided $10,000 to implement a containment program, and Idaho provided $31,000 to make treatments alongside transportation routes, and the Salmon River infestation.

PINK BOLLWORM

Mr. WHITTEN. For the pink bollworm program, you have indicated that states have gained the necessary knowledge and ability to assume primary responsibility for maintaining this program. While that may be true, has there been any indication that they are willing to accept the additional responsibilities?

Dr. GLOSSER. The State of California has indicated a willingness to accept additional responsibilities regarding the pink bollworm program. The California Cotton Pest Control Board has used $2.1 million in grower funds to purchase a building which will be used for rearing sterile pink bollworm moths. California growers have also committed approximately $3.8 million toward renovating the building. Their desire is to prepare the building to produce the same number of sterile moths as the old facility.

Program cooperators in California are willing to continue funding the rearing operations at the current level, which is approximately $1.8 million per year. In addition, they spend approximately $3.3 million in field operations to protect the San Joaquin Valley. The growers' contribution represents 87 percent of the total San Joaquin Valley program.

Mr. WHITTEN. It has been reported that western growers are interested in expanding the pink bollworm program beyond the San Joaquin Valley. Has APHIS had any discussions concerning this plan? Please provide any details regarding this plan. What would it cost to increase the sterile moth production by twofold or fourfold?

Dr. GLOSSER. Cotton growers in the Southwest have wanted effective areawide management of the pink bollworm for some time. To address this need, a Science Advisory Committee met early last year. The Committee included growers, researchers, and individuals from industry, extension, and regulatory agencies. They represented Arizona, California and Mexico. They reviewed the latest technology for controlling pink bollworm, including a combination of sterile moths and pheromone. We have successfully tested this technology on limited acreage for several years. The Committee recommended a 3-year pilot test on 15,000 to 20,000 acres. The test site has not been determined.

The National Cotton Council is leading the effort to develop a specific plan for the 3-year pilot test. The workplan should be complete by February 1991, with the test beginning in 1993 or 1994.

Cotton growers in California have purchased a building for rearing sterile pink bollworm moths, and they have agreed to partially renovate that building. While that building is being renovated, specialized rearing equipment must be fabricated and installed. APHIS has agreed to supply this specialized equipment as funding permits. The facility should be renovated, equipped, and operating by 1993 or 1994.

Before beginning the pilot test; however, the new facility must be able to produce three times as many sterile moths as the current facility. This will require additional renovation and equipment. Delays in increasing moth production will delay the pilot test.

The pilot test will demonstrate the efficacy of the latest technology in controlling the pink bollworm over a large area. If the technology is successful, it could be implemented in other areas by Extension and organized grower groups. It is important to note that this control technology uses no hard chemical pesticides. It is dependent only on biological control measures.

APHIS does not intend to fund or maintain this new technology after the pilot test is completed.

It will cost approximately $3 million to equip the new facility to produce the same number of sterile moths as the old facility. To support the pilot test, the new facility would need to produce three times as many moths as the old facility. A two-fold increase would not be sufficient to meet the demand for sterile moths during the pilot test.

The pink bollworm program was funded at $1.7 million in FY 1990. An increase of approximately $5.8 million is necessary to produce twice as many sterile moths as the old facility. An increase of approximately $8.7 million is necessary to produce three times as many moths as the old facility. This level of production is needed to run pilot test. An increase of approximately $11.3 million is necessary to produce 4 times as many sterile moths as the old facility.

PSEUDORABIES

Mr. WHITTEN. The original pseudorabies eradication effort was designed as a ten-year project with significant support from APHIS. Your fiscal year 1991 budget request reduces APHIS support and suggests a restructuring of the program that would entail stretching out the time in which eradication would occur. If, as you suggest, the timetable would increase to 12–15 years, what would be the economic impact to the swine industry?

Dr. GLOSSER. Extending the program timetable would principally slow the programs in high-incidence States, while low-incidence States continue to progress on their own. This would extend the period of time that expensive interstate movement requirements remained in place. The program is presently ahead of schedule and reduced momentum will contribute to increased cost. Estimates developed by Iowa State University indicate that losses to the industry for each additional year of operation would amount to at least $20 million per year. In addition, the swine industry and State Departments of Agriculture are currently responsible for 60–70 percent of the funding of pseudorables eradication.

SALMONELLA ENTERITIDIS

Mr. WHITTEN. Please explain how your recent declaration of emergency to transfer funds from CCC to APHIS to institute a mandatory testing program for *Salmonella enteritidis*, will be coordinated with the National Poultry Improvement Plan.

Dr. GLOSSER. This declaration of emergency is believed necessary to protect the egg industry and the consuming public from the threat of *Salmonella enteritidis* (SE) infection associated with eggs.

While nearly all of the egg-type breeding flocks were already participating in the U.S. Sanitation Monitored program of the National Poultry Improvement Plan (NPIP), the emergency program will ensure that all hatching eggs and chicks from egg-type breeding flocks moving through interstate commerce will be participating in the U.S. Sanitation Monitored program of NPIP, or an equivalent program.

The major thrust of the program will be in protecting the egg industry and poultry health by preventing the spread of virulent SE involved in human outbreaks in commercial table-egg production facilities. This action at this time will aid in building consumer confidence in egg products. The intent of this program under APHIS is that the egg-type chicken breeding industry will still be under the supervision of NPIP.

ANIMAL WELFARE

Mr. WHITTEN. You propose to hire 11 veterinary medical officers and health technicians to augment the field force of inspectors for the animal welfare program during fiscal year 1991. Where would these inspectors be located?

Dr. GLOSSER. The 11 positions would be distributed nationwide throughout the five sectors based on workload and need. Exact locations have not yet been determined.

Mr. WHITTEN. What was the total cost of operating and implementing the 1985 Amendments to the Animal Welfare Act?

Dr. GLOSSER. We estimate that it will cost research institutions $100 million annually for attendant care to comply with the regulations resulting from the Amendments. One-time construction costs will exceed $800 million. In addition, the Amendments will have a significant impact on APHIS, increasing the need for staff to conduct inspections and pursue violations.

Mr. WHITTEN. You have stated that the volume of comments received with respect to Part 3 of your proposed regulations for the Animal Welfare Act have been so great that you will probably need to re-propose Part 3. When do you expect to do that? Please give us a brief description of the types of comments you are receiving related to Part 3 and those that you think need the most attention for a rewrite.

Dr. GLOSSER. We are in the process of rewriting the proposal now, and hope to have it through Department clearance by May 15, 1990. Two subjects received most of the comments related to Part 3—the exercise requirements for dogs, and the psychological well-being of non-human primates. Those two areas will receive most of our attention in the revision of the proposal.

ANIMAL DAMAGE CONTROL—METHODS DEVELOPMENT

Mr. WHITTEN. The most serious shortfall in the animal damage control program appears to be in methods development, particularly in relation to pesticide registration and re-registration. It has been reported that the program is several million dollars short in keeping up with current standards for FY 1990. Please provide some details on the funds necessary to maintain existing registrations.

Dr. GLOSSER. We estimate that we would need nearly $9 million to conduct the research required each year to maintain pesticide registrations. These resources would fund laboratory analyses and field studies necessary to maintain Compound 1080, Strychnine, Zinc Phosphide, Sodium Cyanide, PA-14, Gas Cartridges, and DRC-1339 registrations. These resources would also be used to fund contracts with commercial laboratories in instances where the data cannot be provided directly by DWRC and congressionally directed activities.

PESTICIDE REGISTRATIONS

Mr. WHITTEN. For the record, please provide a listing of those pesticide registrations tht ADC has participated in with industry in registering or re-registering.

Dr. GLOSSER. The Denver Wildlife Research Center has participated with industry in generating data for strychnine registrations, the livestock protection collar, DRC-1339, Avitrol, Mesurol, Zinc Phodphide, And PA-14. We have also participated with public entities in generating data for compound 1080, strychnine products, zinc phosphide baits, diphacinone for mongoose control, and single-dose baits and M-44 for arctic fox control.

BIOTECHNOLOGY

Mr. WHITTEN. How many requests has APHIS received to provide assistance for genetically engineered products during fiscal year 1989? How does this compare with fiscal years 1988 and 1987?

Dr. GLOSSER. In FY 1989, APHIS issued 281 permits for the field testing, interstate movement, and importation of genetically modified plants and microorganism. This is compared with 165 in 1988 and 3 in 1987. APHIS also licensed veterinary biological products produced through biotechnology, including 3 in FY 1989, 4 in FY 1988, and 11 in FY 1987. In addition to issuing permits and licenses, APHIS provided technical assistance to a variety of entities at the State, national, and international levels, on the development of procedures and regulations dealing with the field testing of genetically modified products.

PLANT METHODS DEVELOPMENT

Mr. WHITTEN. You have indicated that an increase of $561,000 for the plant methods development program would continue support of methods development activities at the same level for many plant protection programs. For the record, please provide a list of those specific pests that work is being conducted on during FY 1990 and the amount expected to be spent during this fiscal year and your proposal for FY 1991.

[The information follows:]

Pest	Fiscal year 1990 spending	Fiscal year 1991 spending
Africanized honey bee	7	0
Boll weevil	114	201
Citrus canker	0	54
Golden nematode	28	30
Grasshopper/Mormon cricket	212	231
Gypsy moth	766	834
Honeybee pests	19	20
Imported fire ant	699	763
Medfly	387	422
Mexfly	189	207
Miscellaneous pests	49	65
Noxious weeds	42	67
Pink bollworm	375	409
Russian wheat aphid	89	0
Witchweed	352	384
Total	3,328	3,687

Mr. WHITTEN. You propose to develop a Plant Methods Development Center System at four sites across the country. What is the current staffing of these sites and what changes do you propose when you establish the Plant Methods Development Center System? Where will these sites be located?

Dr. GLOSSER. The current system consists of centers in Hoboken, New Jersey; Otis, Massachusetts; Whiteville, North Carolina; Mission, Texas; and a substation of the Mission Center in Phoenix, Arizona. The Hoboken Center employs a Center Director, assistant director, 4 staff specialists, an entomologist, 4 maintenance workers, and 2 secretaries. The Otis Center employs a Center Director who is an entomologist, 5 other entomologists, an agriculturalist, 2 biological technicians, an equipment specialist, a maintenance mechanic, and 2 secretaries. The Whiteville Center employs a Center Director who is an agronomist, another agronomist, 2 secretaries, an agriculturalist, a biological aid, an engineering technician, and a biological technician. The Mission Center employs a Center Director, 5 entomologists, a microbiologist, 2 secretaries, and 3 biological technicians. The Phoenix Center employs a station supervisor, 4 entomologists, 3 biological technicians, a secretary, an insect production worker, and a biological aid.

Under the revised system, our Phoenix Center will become our Western Center, our Mission Center will become our Central Center; the human and physical resources from our Hoboken Center along with some resources from our Whiteville will be combined to form our Eastern Center; and our Otis Center will be included in our National Center. The only major change will be the loss of the Hoboken Center Building.

The Western Center will be responsible for activities concerning pink bollworm in cotton, rangeland grasshopper, and other high-priority needs unique to the Western United States and Northern Pacific area. The Central Center will be responsible for boll weevil eradication, Tropical fruit fly control, and biological control pilot testing. The Eastern Center will complete witchweed work by FY 1996 and simultaneously become APHIS' premiere Center for developing new methods in pest detection and exclusion, and AQI.

The National Center will provide technical assistance for gypsy moth control and increase its involvement in sophisticated and pervasive technologies, such as the evaluation of biologically-based control techniques, molecular entomology, and biological risk assessments.

We will have a Western Center at Phoenix, Arizona; a Central Center at Mission, Texas; a Eastern Center at Research Triangle Park, North Carolina; and a National Center at Otis, Massachusetts.

USER FEES

Mr. WHITTEN. Your budget request includes proposed legislation to charge user fees for the agricultural quarantine inspection program. Please provide the details on how you would charge these fees, including what amounts per person, etc.

Dr. GLOSSER. APHIS has proposed legislation which would allow us to fund the AQI line-item entirely through user fees. The user-fee proposal would give APHIS authority similar to that already given to the Customs Service and the Immigration and Naturalization Service. We envision collecting fees from each passenger arriving aboard a commercial aircraft or vessel for inspection services, and from commercial transport operators for preclearance or inspection of vessels, aircraft, trucks, and railroad cars. In addition, fees would be charged for phytosanitary certification of exported plants and plant products.

We are currently developing several options for determining the individual charges. The rates will be based on the costs associated with performing the activity. The amount to be charged each passenger would be about $3.00 to $3.45 per person, and would be collected by the carrier. The cost for issuance of phytosanitary certificates would be about $13.25 to $25.00.

Mr. WHITTEN. You also propose a user fee related to the import/export program. Please provide the details related to how you would implement this program, including the individual costs.

Dr. GLOSSER. We propose to collect fees to recover the full cost of providing services to importers and exporters of animals and animal products. APHIS currently charges fees to recover the cost of caring for animals in import quarantine facilities. We now propose charging for services performed by veterinary medical officers—VMO—and for laboratory services for all imported animals and birds, as well as for laboratory testing and health status certification for exported animals and birds.

The fees charged will cover the full cost to APHIS to perform these services. The individual costs will be based on the species of animal, and the amount of services required to quarantine the animal. For example, the current quarantine cost for a European horse is $216.60—3 days at $72.20 per day. Under a user fee system, we would recover the cost of testing, veterinary inspection, and health certificates, which would increase the current cost by about $47.

Mr. WHITTEN. Please provide the details of your proposed legislative program for veterinary diagnostics user fees.

Dr. GLOSSER. We propose to charge fees for certain laboratory testing associated with import/export, and reagent production performed for Federal agencies, States, industry, universities, and private practitioners. The APHIS National Veterinary Services Laboratory serves a national reference laboratory, having the capability to diagnose a wide variety of animal diseases. Under the proposal, APHIS would charge for disgnostic tests performed for import and export animal health certification. Currently, APHIS does not charge for these services, though the cost of providing these services runs between $10 to $500 per sample. The actual cost depends on the species of animal being tested, the complexity of the tests performed, and the number of test performed on the sample.

APHIS also proposes charging for certain reagents, produced at NVSL, which are distributed to Federal and State diagnostic laboratories for animal testing. These reagents include some brucella and Newcastle antigens, which are not available from private industry. APHIS expects to recover $250,000 to $750,000 in costs through the sale of these reagents.

Mr. WHITTEN. In fiscal year 1988 APHIS began the intensified commercial enforcement project along the Canadian border. Please describe the project and what type of resources you now have allocated to it.

Dr. GLOSSER. The Agency began the project in FY 1988 due to a concern about the level of staffing and the ability to provide inspections along the Canadian border. The objectives of the project were to improve commercial shippers' compliance with APHIS regulations at the Canadian border and to gather information about the staffing needs at specific locations at the Canadian border. As a followup to the project, we have increased coverage at selected Canadian border ports at major crossings. Two officers were assigned to Blaine, Washington; one to Buffalo, New York; one to Rouses Point, New York; and one to St. Albans, Vermont.

BIOTECHNOLOGY

Mr. WHITTEN. For the record, please provide a list of pending or approved introductions of genetically modified organisms into the environment that were subject to review by APHIS.

[The information follows:]

PERMITS ISSUED FOR RELEASE INTO THE ENVIRONMENT UNDER 7 CFR 340

Company	Organism	Location
Calgene	Tomato containing anti-sense endopolygalacturonase enzyme gene	HI
Monsanto Co.	Tomato expressing delta-endotoxin gene of *Bacillus* *thuringiensis* subsp. *kurstaki*	FL
Rohm & Haas	Tobacco expressing delta-endotoxin gene of *Bacillus* *thuringiensis* var. *berliner*	NC
Calgene	Glyphosate tolerant tomato	CA
Calgene	Tomato containing anti-sense endopoly-galacturonase enzyme gene	CA
Agracetus	Cotton expressing delta-endotoxin gene of *Bacillus* *thuringiensis* sub. *kurtaki*	MS
Monsanto	Potato/Virus/X/Y & Potato Leaf Roll	IL
Monsanto	Bt tolerant tomato	IL
CGI	*Cxc*/Bt in corn	IL/MD/MN/NE

Monsanto	Bt tolerant tomato	CA
Monsanto	Virus X/Y tolerant potato	ID
Monsanto	Glyphosate tolerant cotton	AL
Monsanto	Glyphosate tolerant soybeans	IL
Monsanto	Glyphosate tolerant soybeans	AR
U Kentucky	Tobacco/mouse metallothionein	KY
Calgene	Bromoxynil tolerant cotton	MS
Northrup King	Glufosinate tolerant alfalfa	CA
CGI	Cxc/Bt/Rice	MD
Northrup King	Alfalfa/glufosinate	MN
Monsanto	Tomato/TmV/ToMV	IL
Iowa State	Tobacco/chloramphenicol acetyl transferase (CAT) gene	IA
Biotechnics	Tobacco/DHDPAS gene	WI
Calgene	Tobacco/BT/CpTi	CA
Iowa State	Poplar/CAT gene	IA
Pioneer	Alfalfa/alfalfa mosaic virus resistant	IA
Calgene	Tobacco/glyphosate	CA
New York State Agricultural Experiment Station, Geneva	Cucumber/Cucumber mosaic virus	NY
Calgene	Cotton/bromoxynil	HI
Monsanto	Cotton/Bt/glyphosate	HI

Monsanto	Soybean/glyphosate	PR
Monsanto	Tomato/Bt	FL
Monsanto	Tomato/Bt	FL
Calgene	Tomato/anti-sense polygalacturonase gene	FL
Monsanto	Tomato/Tobacco MV/ Tomato MV	FL
UC Davis	Walnut/Marker Genes	CA
Auburn Univ.	Xanthomonas/Marker Genes	AL
USDA/ARS	Potato/Marker Gene	ID
UpJohn	Cantaloupe and squash/ CMV and/or Papaya Ringspot Virus	MI
UpJohn	Cantaloupe and squash/ CMV and/or Papaya Ringspot Virus	CA
UpJohn	Cantaloupe and squash/ CMV and/or Papaya Ringspot Virus	CA
UpJohn	Cantaloupe and squash/ CMV and/or Papaya Ringspot Virus	GA

o TMV - Tobacco Mosaic Virus
oo AMV - Alfalfa Mosaic Virus

PENDING APPLICATIONS FOR ENVIRONMENTAL RELEASE AS OF 03/14/90

Ciba-Geigy	Tobacco/Bt	NC
Northrup King	Cotton/Bt or glyphosate	MS
Rohm & Haas	Tobacco/Bt	NC
Crop Genetics	Cxc/Bt in corn	MD
Calgene	Cotton/bromoxynil	MS
Calgene	Tomato/anti-sense PG gene	CA
Monsanto	Cotton/glyphosate	AL

Monsanto	Cotton/Bt	AZ, IL
Monsanto	Cotton/glyphosate	AZ, IL
LSU	Rice/marker gene	LA
USDA/ARS	Potato/Bt	WA
Monsanto	Potato/virus X, Y, potato leaf roll	WA
Monsanto	Cotton/Bt	AL, AZ, CA, LA, MS, TX
Monsanto	Potato/Bt or virus X, Y, and potato leaf roll	IL
BioTechnica	Corn/marker genes	IA
Monsanto	Soybean/glyphosate	IL
Monsanto	Soybean/glyphosate	AR, GA, IL, IN IA, KY, MO, NE, OH, TN, VA
Monsanto	Soybean/glyphosate	AR, IL, MD
UpJohn	Tomato/tobacco mosaic virus	MI
Dupont	Cotton/sulfonylurea	MS
NYS Ag Exp Station	Cucumber/CMV	NY
Univ. of Kentucky	Tobacco/tobacco vein mottling and tobacco etch viruses	KY
Canners Seed	Tomato/glufosinate	CA
Calgene	Tomato/anti-sense to pectalytic enzyme; or cytokinin pathway	CA

CONTINGENCY FUND

Mr. WHITTEN. During fiscal year 1989 the APHIS contingency fund was used for a variety of problems. Please list those activities where the contingency fund was used and how much of the fund was used for each.

[The information follows:]

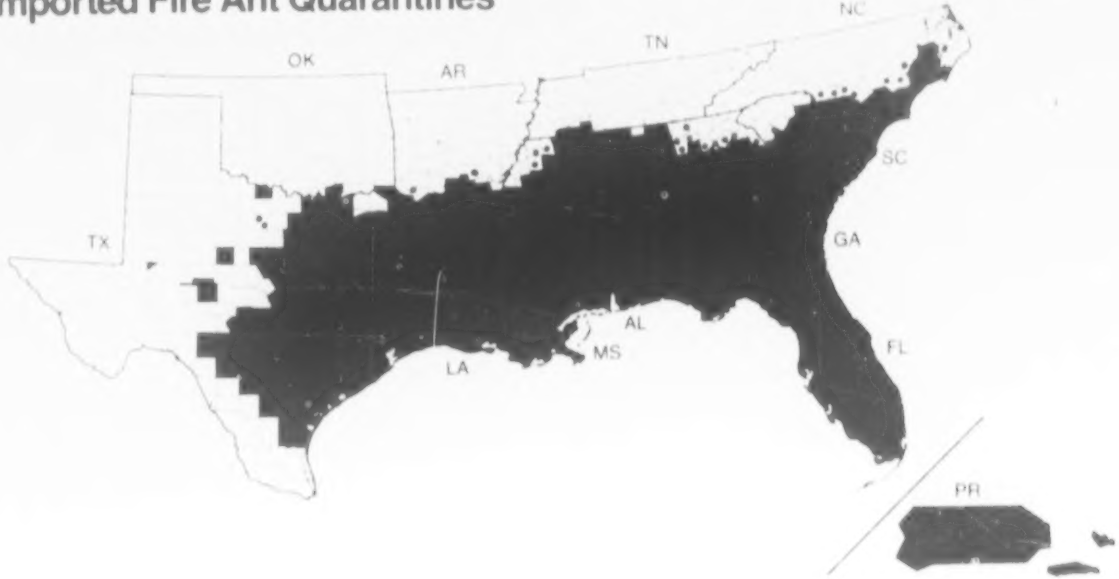
Contingency fund obligations—fiscal year 1989

	Thousands
Exotic Newcastle disease	$158
Exotic ticks	140
Mediterranean fruit fly—California	2,604
Mediterranean fruit fly—Guatemala	441
Salmonella enteritidis	498
Tuberculosis	329
Total	4,170

Mr. WHITTEN. For the record, please provide the APHIS maps that show specific individual infestations of pests.

[The maps follow:]

Imported Fire Ant Quarantines



Conditions of Movement

Counties entirely colored are completely regulated; counties partially colored are partially regulated.

▇ Areas infested with Imported Fire Ants

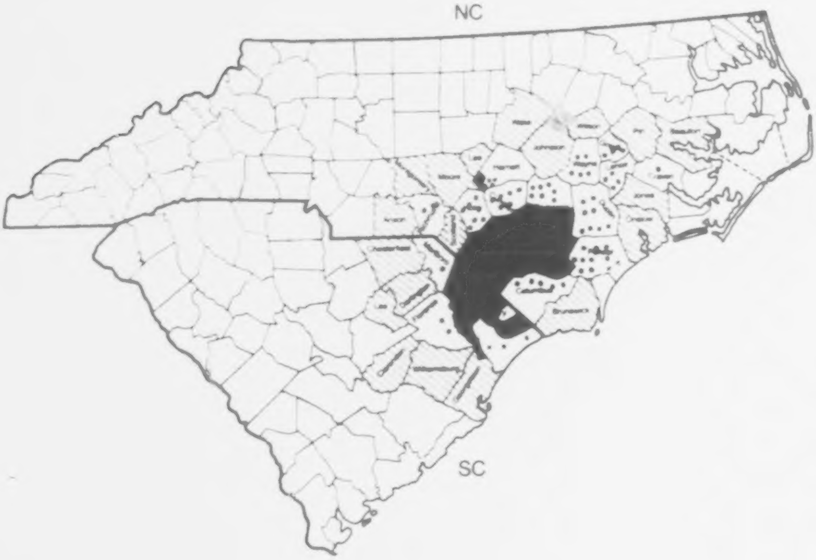
Restrictions are imposed on the movement of regulated articles from Red areas into or through white areas.

Consult your State or Federal plant protection inspector or your county agent for assistance regarding exact areas under regulation and requirements for moving regulated articles. For detailed information see 7 CFR 301.81 for quarantine and regulations.

U.S. Department of Agriculture - Animal and Plant Health Inspection Service
Plant Protection and Quarantine Cooperating With Affected States

Revised July 1989

Witchweed Quarantines



Counties entirely shaded are completely regulated; counties partially shaded are partially regulated.

■ Suppressive area—
State and Federal regulations
(Suppressive treatments in progress or planned)

▨ Eradicated—
regulations removed

Restrictions are imposed on movement of regulated articles from a regulated area.

1. From green into or through white.
2. Green into green.
3. Within green.*

*If required by an authorized inspector

Consult your State and Federal plant protection inspector or your county agent for assistance regarding exact areas under regulation and requirements for moving regulated articles. For detailed information see 7 CFR 301.80 for quarantine and regulations.

See reverse side for list of regulated articles

U.S. Department of Agriculture • Animal and Plant Health Inspection Service
Plant Protection and Quarantine Cooperating With Affected States

Slightly revised August 1989

HYDRILLA

Mr. WHITTEN. The APHIS Noxious weeds program has cooperated with the Imperial Irrigation District to construct a hatchery for hydrilla eating fish. Is the Imperial Valley project included in the Hydrilla Eradication Action Team in California plan for eradication by 1996?

Dr. GLOSSER. Actually, APHIS did not cooperate with the Imperial Valley Irrigation District—IID—to construct the hatchery. However, we do supply fish for the facility. In return, the IID provides fish for our eradication effort in Mexico. The project has been included in the Hydrilla Eradication Action Team's plan for eradication in California by 1996.

Mr. WHITTEN. What support does APHIS provide to the eradication effort for hydrilla?

Dr. GLOSSER. The eradication effort for hydrilla is located in the Western Region of the U.S., specifically California and the Mexican portion of the Imperial Valley. In FY 1990, APHIS provided financial support for the eradication effort in the sum of approximately $100,000. The Imperial Valley Irrigation District in California received $75,000 for the maintenance of the hatchery, and technical assistance. While the State of California and the Imperial Valley Irrigation District are directing their efforts in California, we are directing our efforts to eradicate hydrilla in the Mexicali irrigation system in Mexico. APHIS provided $25,000 in funding to the program, in addition to overseeing the project, personnel, and equipment. The fish are supplied by the Imperial Valley Irrigation District.

SALMONELLA ENTERITIDIS

Mr. WHITTEN. For the record, please provide a five-year table reflecting the number of outbreaks of *Salmonella enteritidis*, and the number of illnesses and deaths from that disease.

[The information follows:]

SALMONELLA ENTERITIDIS—OUTBREAKS, ILLNESSES, AND DEATHS—1985–89

	Outbreaks	Nationwide reported illnesses	Outbreak related deaths [1]
1985	19	5,000	1
1986	34	6,000	6
1987	50	7,000	15
1988	37	7,000	8
1989	75	([2])	13
Total	215	25,000	43

[1] The number of deaths stated are estimated from outbreaks only, they do not include deaths in sporadic cases, for which numbers are unavailable.

[2] The number of illnesses which occurred in 1989 has not yet been tabulated.

Note: As of March 15, 1990 the numbers of outbreaks and illnesses in 1990 have greatly surpassed the numbers for the same time period of 1989. (An "outbreak" refers to "two or more persons who become ill after consuming a common food item which was produced at a common location.")

BUILDINGS AND FACILITIES

Mr. WHITTEN. Your fiscal year 1991 budget request for Buildings and Facilities just about doubles from $13 million to $25 million.

Please list all known requirements for APHIS Buildings and Facilities that are in need of repair and alterations.

Dr. GLOSSER. I will provide that information for the record.

Project and location	*Estimated cost*
Medfly facility-backup generator, Waimanalo, HI	$175,000
Incinerator improvements, Miami, FL	150,000
Building alterations, Waimanalo, HI	200,000
Quarantine facility renovations, Mission, TX	550,000
Biocontrol lab repairs, Niles, MI	50,000
Replace boiler and asbestos, Pocatello, ID	250,000
Master planning, Niles, MI	100,000
Routine repairs, Beltsville, MD	100,000
Major facilities:	
Newburgh, NY	50,000
Key West, FL	50,000
Denver, CO	50,000
Ames, IA	200,000
Mission, TX	50,000
Gulfport, TX	50,000
Repairs, Plum Island, NY	223,000
Miscellaneous repairs, APHIS-wide	2,148,000
Total alterations and repairs	4,396,000
Construction:	
Wildlife holding facility, Fort Collins, CO	4,000,000
Plant gerplasm quarantine center, Beltsville, MD	12,000,000
Facility consolidation, Plum Island, NY	5,000,000
Total construction	21,000,000
Total buildings and facilities	25,396,000

DENVER WILDLIFE RESEARCH CENTER

Mr. WHITTEN. In the last several years Congress has provided additional funds to the Denver Wildlife Research Center to bring it into full compliance with the standards of the Good Laboratory Practices—GLP—and the Animal Welfare Act. Your budget request for fiscal year 1991 includes $4 million to transfer a portion of the Denver Wildlife Research Center to a facility near Fort Collins, Colorado. Is this a new decision or have there been long-term plans to transfer the facility. Is the Research Center now in compliance with GLP and the Animal Welfare Act?

Dr. GLOSSER. This is a new decision. Our FY 1990 request was to construct an animal research facility at Denver, Colorado. As planning progressed for the animal research facility it became apparent that the Denver site would not be suitable because of its urban location, and space limitations.

The registration data that DWRC presents to EPA meets GLP standards. DWRC is still working to develop and improve its documentation and archiving systems to fully accommodate the large data volumes needed to meet with AWA standards. This was accomplished by the center centralizing its animal care functions, hiring an attending veterinarian and certified animal care technicians, instituting an animal care and use committee, making short term modifications to some existing indoor animal holding facilities, and closing several animal holding facilities until new ones are constructed at Fort Collins.

Mr. WHITTEN. Since the ADC program has come under the auspices of APHIS, how much has been spent on refurbishing the Denver Wildlife Research Center?

Dr. GLOSSER. We have spent about $1.4 million refurbishing DWRC facilities. The largest renovation is the rehabilitation of the DWRC Chemistry laboratory in Denver, which will cost about $1 million and will be completed in the next month or two. Additionally, we have spent another $400,000 on repairs to other DWRC satellite facilities in Logan, Utah; Gainesville, Florida; and Laredo, Texas.

Mr. WHITTEN. What would the total cost be if the entire Research Center were transferred to a location such as Fort Collins?

Dr. GLOSSER. There is no estimate available for the cost of moving the entire facility. We are currently preparing a master plan for the Wildlife Research Center. We would be pleased to provide you with a summary of that plan once it is finalized.

Mr. WHITTEN. Why was Fort Collins selected?

Dr. GLOSSER. The Fort Collins site offers us several unique qualities. First, it is located on the campus of Colorado State University, where there is already a strong interest in wildlife research, and where there is already zoning for wildlife research facilities. Moreover, Fort Collins is within reasonable commuting distance of the existing research and supporting laboratories. This is essential to permit the transfer of specimens, samples, and research data between these facilities.

PLUM ISLAND ANIMAL DISEASE CENTER

Mr. WHITTEN. Please describe the improvements proposed for the APHIS facilities at the Plum Island Animal Disease Center in New York.

Dr. GLOSSER. We plan to consolidate all APHIS and ARS activities into Building 101 at the Plum Island Animal Disease Center—PIADC. Improvements to the building will include: laboratory renovation, roof repairs, installation of improved laboratory filtration, new incinerators, new autoclaves, and various other building repairs. This consolidation will also include space for administrative and other support services. When consolidation is complete, the older more maintenance intensive buildings now in use will be closed.

NATIONAL GERMPLASM QUARANTINE CENTER

Mr. WHITTEN. Last year considerable funds were provided for completion of the planning of the National Germplasm Quarantine Center at Beltsville, Maryland. Your fiscal year 1991 request includes $12 million for construction. What is the total planned construction cost of the facility and what is the timeframe towards completion.

Dr. GLOSSER. The 3 phase program outlined in the National Plant Germplasm Quarantine Center Master Plan will cost a total of $33 million to design and construct. The construction will extend into late 1995.

The funds requested for FY 1991 are for the first phase of the project which includes site improvement, and the construction of several greenhouses and a pesticide storage structure. This phase is scheduled to be completed in late 1993.

The second phase of construction is slated to cost $12 million, and will include the construction of several greenhouses, a headhouse/utility substation, and additional storage facilities. This phase is scheduled to take about 30 months to complete.

The final phase will cost $9 million. This phase will consist of the construction of an ARS research facility and two research greenhouses. The third phase will take about 3 years to complete.

AIRCRAFT

Mr. Whitten. For the record, please list all of the aircraft in the APHIS inventory, by type, and include the number of hours flown during fiscal years 1988 and 1989. Also, please list the age of all these aircraft.

[The information follows:]

Type (civilian make) and registration No	Year acquired	Fiscal year— 1988 hours flown	Fiscal year— 1989 hours flown
Beechcraft, N-6810S	1976	397	119
Beechcraft, N-25698	1973	180	154
Beechcraft, N-25696	1973	157	54
Cessna, N-9664K	1983	111	143
Cessna, N-9486G	1971	119	221
Cessna, N-72306	1969	271	372
Cessna, N-2737X	1965	163	114
Cessna, N-731EQ	1977	188	120
Cessna, N-9935R	1986	36	437
Beechcraft, N-166ZA	N/A	43	(1)
Beechcraft, N-165ZA	N/A	60	(1)
Cessna, N2728X	N/A	11	(1)
Arctic Turn, N 734	1985	663	712
Piper, N-742	1964	555	763
Piper, N-752	1975	425	526
Piper, N-726	1983	503	654
Piper, N-746	1963	181	135
Piper, N-744	1982	493	690
Piper, N-751	1978	625	580
Hughs helicopter, N-796	1974	453	494
Hughs helicopter, N-1099	1979	280	600

[1] Excessed

Mr. Whitten. Your fiscal year 1991 request includes purchase of four aircraft of which two would be replaced. What type of aircraft do you expect to purchase in both instances for new aircraft and for replacement? What would be the primary purpose of these aircraft?

Dr. Glosser. We have not earmarked any funds specifically for aircraft purchases in FY 1991. The fleet has grown since ADC was transferred to APHIS from the U.S. Department of the Interior and the amount of air hours has increased; therefore, we decided to seek increased purchasing authority. While this replacement authority is requested each year in the appropriation act, the aircraft are replaced only when necessary to maintain the fleet in safe and efficient operating condition.

The replacement aircraft would be used mainly in pest and disease management programs. These aircraft are sometimes used to supervise and observe contract planes which are newer, faster models than those the Agency has available. Aircraft used in the ADC program are for aerial hunting.

PERSONAL SERVICE CONTRACTING AUTHORITY

Mr. **Whitten**. You have requested appropriations language that would allow the agency to have permanent contracting authority for hiring local employees in foreign countries. Previously, you have used the Department of State's authority to do this. Why has the Department of State withdrawn this authority from APHIS?

Dr. **Glosser**. In January 1988, the Department of State restricted U.S. Embassies from delegating authority to other agencies, unless it is of direct benefit to the State Department.

Mr. **Whitten**. Please provide a five-year table showing the approximate number of staff years in each year that were hired through the Department of State's authority.

[The information follows:]

APHIS EMPLOYEES HIRED THROUGH DEPT. OF STATE AUTHORITY

[Number of staff years, by fiscal year]

	1986	1987	1988	1989	1990	Total
Agricultural aides	13.5	14.4	15.3	14.5	13.4	71.1
Custodial/guard services	12.0	12.0	13.0	14.0	14.0	65.0
Total	25.5	26.4	28.3	28.5	27.4	136.1

Mr. **Whitten**. Please provide some selected examples of the type of work that local employees in foreign countries do.

Dr. **Glosser**. Local employees perform supplemental tasks for Officers-in-Charge (OIC) at one-person locations, such as Bermuda, Freeport, and Nassau, Bahamas; and are acting OIC when the regular officer is on home leave, annual leave, or training. These employees also provide custodial and guard services throughout APHIS offices in international locations.

Mr. **Whitten**. Describe for us the impact to the APHIS mission if it does not receive local contract authority for overseas activities.

Dr. **Glosser**. Without this authority, APHIS would have to assign inspectors from the U.S. to foreign locations as backups for officers in charge who are on home leave, annual leave, or training. The costs for salary and temporary duty travel of a U.S. employee would be substantially higher than the cost for a person hired locally on a personal service contract. Additionally, the safety of employees and government property would be jeopardized if the Agency did not have the authority to contract for local custodial and guard services.

Mr. **Whitten**. Mr. Skeen?

Mr. **SKEEN**. Thank you, Mr. Chairman. And furthering the cause of misunderstanding, let's talk about the ADC program, Dr. Glosser, and welcome, by the way.

Dr. **GLOSSER**. Thank you.

Mr. **SKEEN**. Last year when we talked about this issue you mentioned that this is probably one of the most misunderstood programs that we have. In light of the fact that the animal rights interests that we have in the United States and their views of this program. I still think it is one of the most misunderstood.

We certainly haven't improved the understanding much in the last few months. Would you give me an idea how important ADC is and whether it benefits others besides western livestock producers?

Dr. **GLOSSER**. Mr. Skeen, I'd be happy to.

The ADC program by many is construed just to be a western livestock issue. The fact of the matter is that coyote depredation east of the Mississippi is becoming an increasing problem. In addition to wildlife suppression of invertebrates, there are bird problems as well. Massive flocks of blackbirds come in uncontrolled and depredate sunflowers, orchard crops, and other small grains. This certainly has implications in the plant area

The aquaculturist knows that the cormorant and other fish-eating birds cause serious damage to farm-raised fish and shrimp. So wildlife damage is a broad agricultural issue with important economic ramifications. Of all of our programs, we have more Congressional directives and interest in the ADC program than any other.

The animal damage control program had its genesis west of the Mississippi but the interest and the need for this type of expertise is needed across the United States and we understand that.

In addition to the roles I mentioned, ADC helps to ensure the safety of America's airports and the travelling public through assistance in control of massive flocks of birds in and around flight paths for the safety of American traverls. We also have population suppression programs when needed to control zoonotic diseases such as rabies.

In summation, there is a broad mission for animal damage control.

Mr. **SKEEN**. For people who live in cities, it is difficult to understand that the primary concern is control, not eradication. Some way we are not getting that story told and you have a lot of folks who want to take the extreme view.

It is wonderful that we can afford that luxury. I am concerned about how do you get the accurate story out. Is the department doing anything about some of these media stories that are off the wall about the programs that are being manifested under the ADC program. Is there any research being done to improve the statistical relationship to what is and what is not valid insofar as the ADC program is concerned?

Dr. **GLOSSER**. Many of the critics throughout the years have said there is no good hard data as to livestock losses caused by wildlife. I think we have an ongoing challenge to develop a method of collecting better data.

Mr. **Skeen**. Do we have a program to do that?

Dr. **Glosser**. We are working with the National Agricultural Statistics Service to look at various options for collecting better data. It is in the research phase. There is a real opportunity here to pass on to the American public information as to what the real impacts and issues are.

In one sense we are limiting ourselves by only reporting losses that are confirmed by ADC employees on site. It doesn't take into account what the actual loss is and we do not yet have a method for making some type of projection.

Mr. **Skeen**. APHIS is working with the National Agricultural Statistical Service in that regard?

Dr. **Glosser**. Yes, we are.

OVERHEAD EXPENSES

Mr. **Skeen**. A lot of concern has been placed upon the overhead expenses that are being charged against the program, and last year the committee provided ADC, after Gramm-Rudman deductions, $3.8 million. But nearly one-fourth of this went to overhead expenses.

Can you give me some justification for this?

Dr. **Glosser**. Overhead expenses include program or operational support costs and administrative costs. All of our line items include more than just the dollars that are available to the field—they also include indirect costs.

Of the $3.8 million that you refer to, almost $1.3 million went to the Denver Wildlife Research Center.

ADC OVERHEAD COSTS

Mr. **Skeen**. $2.6 million then went to other operations?

Dr. **Glosser**. Yes, sir. Allocations to field stations increased by $1.2 million, field costs paid from central allocations increased by $433,000. I have a breakdown of all the various items that supported the field in this allocation. Our overhead costs in the ADC program are less than 15 percent.

Mr. **Skeen**. The complaint is the work is going as overhead and not getting to the field. What you are talking about when you state overhead expenses are also field operation expenses.

Dr. **Glosser**. Not all field operations costs are paid from local allocations. Many costs are paid from central allocations.

Mr. **Skeen**. And the overhead charges are part of that?

Dr. **Glosser**. Yes, sir, they are.

Mr. **Skeen**. Denver Wildlife Research, we provided $1.6——

Dr. **Glosser**. $1.3 million, sir.

Mr. **Skeen**. What is being done with this money?

PESTICIDE REGISTRATION

Dr. **Glosser**. This money is going into research to provide data to the Environmental Protection Agency for pesticide registration.

I testified last year that we were in violation of the good laboratory practices regulation of EPA and that by 1990 we will be in compliance. We are. Monies have been used to update quality control at the laboratory. There are also monies requested for animal holding facilities to put us in compliance with our own Animal Welfare Act. We have a serious funding issue in that the high cost of registration of the present chemicals that we use routinely in the ADC program were unanticipated. It is an issue we are going to have to address.

Mr. SKEEN. Last year we thought we would be in compliance by 1990?

Dr. GLOSSER. Yes, sir, we did.

Mr. SKEEN. How much do you lack?

Dr. GLOSSER. We are in compliance this year.

Mr. SKEEN. You will finish your program?

Dr. GLOSSER. We are now ready to address the whole pesticide reregistration issue which is a very expensive process. We have 22 registrations for which APHIS is the primary registrant. These include strychnine, Compound 1080, and zinc phosphide. Over the next five years we project additional costs of $30 million to meet the FIFRA requirements for registration.

Mr. SKEEN. What impact has FIFRA have on the research that is being conducted at the Denver center?

Dr. GLOSSER. It has forced us to focus——

Mr. SKEEN. We helped you out a lot?

Dr. GLOSSER. Yes. It has increased the cost of data collection for chemical registration and taken money away from discovery research which is also necessary for the program's future work.

Mr. SKEEN. There was a midstream adjustment too that you had to make?

Dr. GLOSSER. Yes, sir.

BOLL WEEVIL

Mr. SKEEN. Let me ask you about one other program. APHIS has funded the international program on surveillance of the northern Mexico boll weevil. I understand there is some talk about discontinuing that program.

Dr. GLOSSER. That is news to me. The Southwest boll weevil program and concurrent survey and detection methods that are used and necessary to monitor that program are vital to us. We have no plans to discontinue that program.

In October 1986, an infestation of boll weevil was discovered in Ciudad Juarez, Chihuahua, Mexico. Cotton production in adjacent areas of Texas and New Mexico was threatened. In order to prevent the further spread of the boll weevil, and to eradicate it from Ciudad Juarez, an interagency task force was formed. This group, consisting of the New Mexico Department of Agriculture, Texas Department of Agriculture, Texas Cooperative Extension Service, USDA-APHIS South Central and Latin American Regions, Sanidad Vegetal, and cotton grower representatives from New Mexico and Texas, eradicated the boll weevil infestation in Ciudad Juarez. Trapping results during 1989, show the boll weevil has been prevented from spreading and weevil populations in Ciudad Juarez are at very low levels.

Due to the success of this effort, we can reduce the number of traps and the frequency of trap-checks in the area without compromising the protection to growers in Texas and New Mexico.

Mr. **Skeen**. It has been a very effective program and we love rumors in the country.

Dr. **Glosser**. We are not going to discontinue that program.

REORGANIZATION

Mr. **Skeen**. What was the stated purpose of the recent reorganization effort within APHIS?

Dr. **Glosser**. The purpose of the reorganization was to improve program delivery and insure that APHIS has the technical expertise to meet ~~future~~ program needs. Most of the organizational changes affected our headquarters units, and we were intended to allow better support for our field operations through clearer direction, better planning, and more efficient use of human resources. I will provide a table which shows the seven objectives of the reorganization.

[The information follows:]

Strengthen the scientific and technical base of the Agency.

Establishment of a planning and decision making system that will seek broad input, be cooperative, and communicative by nature, and result in sound decisions.

Maintain and build on the strength of our laboratories.

Improve our emergency response systems.

Improve management in our international programs.

Establish systems of compliance which rely on education and persuasion rather than punishment.

Increase our attention to animal care.

Mr. **Skeen**. Has the reorganization effort been completed?

Dr. **Glosser**. Yes sir, the reorganization was completed about a year ago.

Mr. **Skeen**. What have been the benefits of reorganization?

Dr. **Glosser**. In the past, some headquarters functions were duplicated or even triplicated. We have consolidated and streamlined activities to eliminate this repetitive effort. For example, we consolidated all of our planning activities into one unit, the Policy and Program Development (PPD) Unit. The creation of this Unit provides an Agency-wide emphasis to functions such as strategic planning and areas of new emphasis.

Our Biotechnology, Biologics, and Environmental Protection Unit brings together specialized permit and licensing functions that rely on sophisticated and highly technical risk assessment. Assembling these functions in one unit encourages resource sharing, increased accountability, and improved service. We have witnessed similar benefits from the reorganization in our Regulatory Enforcement and Animal Care Unit, where inspectors are now devoting full-time to animal welfare duties. Another Unit, Recruitment and Development, brings together functions designed to recruit and develop people with technical, managerial and interpersonal skills needed to effectively perform the Agency's mission.

Mr. **Skeen**. Is there any area where reorganization has not met the expected goals of APHIS?

Dr. **Glosser**. The reorganization has achieved its major objectives. However, since the reorganization, we have examined whether expertise is properly located within the organization. As a result of this examination, we intend to shift certain personnel between units so that program operations can be improved. Specifically, we are shifting a small number of people from PPD back to the units responsible for the delivery of APHIS program activities. These people will work on program design and operational planning. We expected such fine tuning as part of the reorganization process and we will continue to evaluate the APHIS organization.

Mr. SKEEN. How has the reorganization impacted ADC operations?

Dr. GLOSSER. The reorganization did not directly affect ADC operations. The changes that were made were primarily at Headquarters. The ADC Research organization, DWRC, was moved to Science & Technology. We believe this will strengthen ADC research through the sharing of experience and resources with other APHIS laboratories. A better research program will benefit ADC operations by providing new tools and maintaining existing ones.

PREDATOR CONTROL

Mr. SKEEN. Please provide information on how much funding went to the Western States in FY 1989 and FY 1990 for predator control?

Dr. GLOSSER. In FY 1989, we allocated $11.2 million for operations in the Western Region. This does not include the cost to carry out Congressional directives or run the Regional Office. Of the $11.2 million, $8.4 million is for predator control. In FY 1990 we allocated $12.3 million for operations in the Western Region of which approximately $9.2 million is for predator control.

Mr. SKEEN. Under the proposed administration budget, how much funding will go to the Western States for predator control programs?

Dr. GLOSSER. Approximately $10.2 million will be spent on predator control in the Western States during FY 1991.

ANIMAL DAMAGE CONTROL

Mr. SKEEN. Of the increase in funds provided in FY 1990 for ADC, how much went to Western States for predator control? How much of this increase went towards ADC efforts to maintain current registrations, expand current uses, and develop new or replacement chemicals?

Dr. GLOSSER. Of the $3.8 million increase appropriated in FY 1990, about $800,000 was allocated for predator control in the Western Region. About $1.5 million of the FY 1990 increase was allocated to the Denver Wildlife Research Center (DWRC). All of this is being used to maintain current registrations. In addition, the DWRC plans to meet increasing registration and re-registration costs by reducing their discovery research work.

Mr. SKEEN. What funding level would be needed to continue ADC programs at current levels?

Dr. GLOSSER. The requested increase in funds would partially offset increased personnel and operating costs and increased costs due to increasing environmental sensitivity. We would also begin a planned program for replacement, training, and development of personnel. However, in order to maintain optimal levels of activities we would need an additional $1,000,000 in salaries, benefits, and relocation costs to fill vacant positions that were delayed as a result of FY 1989 reductions and are not funded by the FY 1990 allocation. These vacancies include Assistant State Director positions and some District Supervisor positions. An additional $2,000,000 is needed to purchase automobiles, equipment, and supplies and $1,000,000 to replace and repair radios. For on-the-ground predator control and aerial hunting $600,000 would be needed to bring these programs up to adequate levels of operations, and $400,000 in travel as many of our employees have to use their personal vehicles for official government purposes.

Mr. SKEEN. What funding level would be required to take care of all pending pesticide registration work for ADC?

Dr. GLOSSER. We estimate that $36.5 million will be needed over the next 5 years to maintain existing registrations. This figure includes $4.3 million to maintain existing data requirements for currently registered chemicals, and $31.3 million to continue the other work that is essential to support the registration research program. This work includes support function such as quality assurance; analytical chemistry; registration coordination; research support for statistics and computing and information management; research administration; and related field and laboratory studies.

Mr. SKEEN. Please provide a list of all pesticide work that is pending, and when ADC expects to complete the work.

Dr. GLOSSER. Registration and re-registration research for ADC pesticides from 1990–1994 will focus on the following compounds and tools: compound 1080 (livestock protection collar), rodent and predator gas cartridges, sodium cyanide (M–44), PA–14 strychnine, and zinc phosphide. Currently identified registration and re-registration data requirements are scheduled to be met for compound 1080 in FY 1990, zinc phosphide in FY 1991, strychnine and gas cartridges in FY 1992, and PA–14 and sodium cyanide in FY 1993, and DRC–1339 in FY 1994. We expect additional data requirements from the Environmental Protection Agency that could extend the schedules for these materials beyond the anticipated due dates, particularly for zinc phosphide, strychnine, and PA–14.

Mr. SKEEN. How many vehicles are used by ADC, and what is the average age of these vehicles?

Dr. GLOSSER. ADC uses 634 vehicles to carry out its program operations. Of these, 203 are Agency owned; 281 are leased from GSA; and 150 are privately or State owned. The average age of the Agency owned fleet is four years with an average of 96,000 miles per vehicle.

Mr. SKEEN. What plans does APHIS have to bring the fleet of ADC vehicle up to date,

Dr. GLOSSER. We will be able to replace less than 30% of those identified for replacement with current funds. I will provide addition information for the record.

[The information follows:]

The Table below illustrates the number of APHIS, ADC owned vehicles and their replacement needs by Fiscal Year.

	Quantity	Cost
Fiscal years:		
1990	93	$1,158,780
1991	52	647,920

	Quantity	Cost
1992	39	485,940
1993	48	590,080
1994	20	249,200

Mr. Skeen. What is the current condition of the ADC two-way radio system?

Dr. Glosser. The present ADC radio equipment is outdated and cannot be maintained because parts are not available.

ADC has developed a new radio management plan to provide for an adequate system that would cover States where radios are needed. Other funding priorities have precluded implementation of the new plan.

Mr. Skeen. When does ADC have to evacuate the Fish & Wildlife Service frequencies?

Dr. Glosser. The agreement between the U.S. Fish and Wildlife Service, U.S. Department of Interior and USDA-APHIS is that the Animal Damage Control Program can use the U.S. F&WS frequencies through FY 1991.

Mr. Skeen. What will APHIS do to meet the commitment regarding F&WS frequencies?

Dr. Glosser. We expect to renegotiate the agreement with U.S. F&WS to allow our use of the frequencies until funds can be obtained for radio replacement.

Mr. Skeen. Does the current condition of the radio system create a safety problem and are ADC employees at risk?

Dr. Glosser. The remote nature of ADC work and aerial hunting operations makes us dependent on radios for communication. Because the radio system is old and somewhat unreliable, there is an increased chance for equipment breakdown. We take every precaution possible to minimize risk to employees.

Mr. Skeen. What was the number of Animal Damage Control Specialists in FY 1986 through FY 1990 and what was the size of the total APHIS headquarters staff during the same years?

Dr. Glosser. I provide that for the record.

[The information follows:]

Total number of Animal Damage Control Specialists funded with Federal and cooperative funds:

	ADC specialists	Total APHIS headquarters staff
Fiscal year:		
1986	493	727
1987	498	727
1988	503	858
1989	511	899
1990 (est.)	532	899

Mr. Skeen. I thank you very much for your responses, Dr. Glosser, and appreciate the problem that you have. I think you are doing an outstanding job. ADC is a good program. It has had its uses, maybe some abuses. Flat out misinformation is the worst thing that is going on and the great calamitarians that operate today are bothersome because it is very difficult to operate a program with any kind of sanity when nobody wants to rely on good information.

Thank you, Mr. Chairman.

Mr. **Whitten**. Mr. Weber?

ANIMAL WELFARE REGULATIONS

Mr. **Weber**. I see I came at the right time. I want to question you about one topic in which I have a particular interest, the issue of animal welfare, which is of increasing concern to commodity groups in my part of the country.

We are in the process as I understand it of promulgating regulations under the Animal Welfare Act which are potentially very costly to agriculture.

Ms. Smith, would you talk about what you see in terms of animal rights activists, and what kind of pressure they have been putting on your department?

Ms. **Jo Ann Smith**. Let me address your question about the pressure placed on the Department. I think we all have a definition, Congressman, of the term "activists." They have an issue and they are concerned about it.

You know that I come from the commodity production segment and we do have a concern about it. The Department is addressing it as a very serious issue and facing our responsibility as mandated by Congress in the 1985 Farm Bill. We have published segments one and two of the animal welfare regulations, and are working on part three as we were directed by Congress to do.

Mr. **Weber**. Have you done any assessment of the costs of the current regulations to the industry?

Ms. **Jo Ann Smith**. Which segment of the industry?

Mr. **Weber**. Any segment, the poultry industry, for instance?

Dr. **Glosser**. The animal welfare regulations do not address farm animals and there are no assessments since we do not regulate poultry under the Animal Welfare Act. We have done no assessments of that.

There was an economic analysis done when we put parts one through three of the regulations together. The analysis showed it would be a major rule and the impact on research organizations would be $1 billion or more. That was our best estimate of the impact.

Other groups say the costs will be higher when these regulations go into effect. We are concerned about those costs and are adjusting as the decisions are made. Parts one and two alone certainly do not qualify for a major rule—they would not have an impact of over $100 million. However, even that is debated.

Mr. **Weber**. Have you projected forward those costs?

Dr. **Glosser**. With regard to research animals, we did project. I don't have the exact number but I can provide it in the record. But it seems to me that our projection showed the annual cost of attendant care because of these regulations to research institutions would be in the range of $180 million per year. Construction costs were estimated to be in excess of $800 million.

If I might, sir, I would like to put those exact terms in the record.

Mr. **WEBER**. So the correct figure is $800 plus $180?

Dr. **GLOSSER**. One hundred eighty million dollars annually for laboratory animal attendant care based on the analysis and publications—$800 million would be for coming into compliance with facility and equipment requirements. The capital outlays would be a one-time cost.

Mr. **WEBER**. Per building?

Dr. **GLOSSER**. Yes, sir.

Mr. **WEBER**. The ongoing cost per year is in the neighborhood of $180 million?

Dr. **GLOSSER**. I think it was $186 million a year, but that was an estimate.

[The additional information follows:]

Under the regulations as originally proposed, APHIS estimated the cost of animal attendant care at $180 million. Now that Parts 1 and 2 of the regulations have been finalized, we are able to reduce the estimate to $100 million.

Mr. **WEBER**. I understand people are looking at ways to place additional regulations on. Is anybody looking at any way to reduce some of those costs?

Dr. **GLOSSER**. We are constantly trying to find ways to reduce the financial impact of regulations. One of the most labor intensive aspects of drafting these animal welfare regulations was conducting the analysis of the impact of both the regulatory burden and also the cost to biomedical research.

As far as plans for additional economic analyses, I think it is contingent, on our review of the many comments we receive on the proposed regulations.

Mr. **WEBER**. Are you aware of any pressure to include farm animals under the terms of that act?

Dr. **GLOSSER**. There has been correspondence encouraging us to do so. It is not discretionary. The Animal Welfare Act excludes farm animals.

Mr. **WEBER**. Does the agency take a stand on that?

Dr. **GLOSSER**. We do not speak to the issue. We have our hands full with administering the Animal Welfare Act as it is written.

Mr. **WEBER**. Ms. Smith, do you have any comments on this issue?

Ms. **JO ANN SMITH**. We take a strong stand that we are not by law charged with the responsibility of farm animals.

Mr. **WEBER**. And don't wish to be?

Ms. **JO ANN SMITH**. And don't wish to be.

GRASSHOPPER AND MORMAN CRICKET

Mr. **WEBER**. I have only one other area of questioning.

We had a controversy in Minnesota and the Dakotas with your agency last year over grasshopper eradication funds. You have a program which compensates local units of government for some costs and we were unable to avail ourselves to the funds because the act was determined to provide funds to rangeland and not cropland.

The weather looks pretty good this week in terms of rain fall, but we are anticipating an infestation the likes of which we haven't seen since the 1930s. Is there a possibility that we can get some help from APHIS in the event our worst fears materialize?

Dr. GLOSSER. We are currently studying this issue. ASCS and APHIS are working cooperatively to address the issue of grasshopper treatment on CRP lands. APHIS's position is that our grasshopper suppression programs are limited to rangeland areas and treatment of small adjacent tracts of CRP land because we are limited by our EIS.

The issue that you refer to in the Red River Valley is CRP land, crop land set aside and not construed by APHIS to be rangeland. ASCS is working on this issue to help.

Mr. WEBER. Where is the distinction between rangeland and cropland?

Dr. GLOSSER. It is regulatory in interpretation.

Mr. WEBER. What is the rationale for that?

Dr. GLOSSER. CRP land is cropland that was taken out of production and put into vegetative cover to reduce soil erosion. The traditional grasshopper program that APHIS has been involved with since the 1930s has been on large tracts of rangeland with grasshopper infestations. Historically, the largest share was Federal land in conjunction with state land and some private tracts.

Mr. WEBER. We are not sure if these grasshoppers are Federal or private but we don't like them and would like your help in getting rid of them.

Dr. GLOSSER. We have no rationale for identifying those and it is a very serious problem.

Mr. WEBER. I understand. It may not turn out to be such a serious problem, but if it is we will be knocking at your door for help.

Thank you, Mr. Chairman.

CLOSING REMARKS

Mr. WHITTEN. We appreciate your appearance here. I was trying to look at the use of words. Earlier you said we will "address." I wish you had said we will solve. There is quite a difference between those words. You just wanted to stick to the truth.

Dr. GLOSSER. Whenever I address something, I have got to find a solution to get myself out of it.

Mr. WHITTEN. You use the word "address"—I have another thought about what it does.

Dr. GLOSSER. My use of it, to me we address a problem head on and attempt to find a solution.

Mr. WHITTEN. Put in the record the last three or four rounds we have had with grasshoppers. It gets me when you see there are 1700 eggs when the normal is 200. It seems it would be so much easier to handle the problem in the egg stage than let the grasshoppers get started.

Go over the last four or five times when we had a terrible grasshopper outbreak and what would have happened if we had moved six months earlier and got the problem when they were in the egg stage.

I want you to address that well and factually so we can help solve it.

[The information follows:]

At the present time, the technology does not exist to treat grasshopper eggs. Grasshopper eggs are encased in a tough eggsac, and are buried in the ground. A chemical that would be harsh enough to kill the eggs could potentially harm beneficial organisms in the ground. Danger to ground water is another concern when considering the use of chemicals underground. To our knowledge, no one has been conducting experiments to use chemicals to treat grasshopper eggs.

There is not a definite correlation between the discovery of grasshopper eggs in an area and a later problem with hatched grasshoppers in that area. It is possible that weather conditions will kill the eggs or immature grasshoppers naturally. Furthermore, just because eggs are not found in an area does not guarantee that there will not be a serious grasshopper problem in the area.

Plowing the ground is an effective method of killing grasshopper eggs. However, this would not be an option for treatment on rangeland. Even if it were possible to chemically treat grasshopper eggs, we might not want to do so in the hope that Mother Nature would take care of the problem without endangering the environment.

Mr. **WHITTEN**. Thank you very much.

Are there further questions?

Mr. **SKEEN**. No further questions, Mr. Chairman.

Mr. **WHITTEN**. We appreciate your appearance and don't ignore this. I have some understanding of problems you have but I think the country needs to know what we are up against. We are cutting a lot of needed programs to go along with the idea that somebody who wants money to play around.

Some of our colleagues have some questions for the record.

Ms. **JO ANN SMITH**. Thank you, Mr. Chairman.

WAIMANALO STERILE FLY FACILITY

Mr. **AKAKA**. Identify and describe the nature of the problems experienced by APHIS which have prevented the Waimanalo sterile fly facility from becoming fully operational.

RESPONSE. During the initial testing of the Waimanalo Sterile Fruit Fly Facility in Hawaii, we discovered that the climate control equipment was not meeting temperature and humidity requirements. This is not an unusual occurrence for insect rearing operations, which require critical environmental conditions. We are however, currently working with the contractor to correct these problems. In the meantime, we have made temporary modifications that will allow us to meet our production schedules. We plan to start delivery of 100 million sterile flies per week to the California emergency beginning the second week of April.

Mr. **AKAKA**. Identify amounts that must be spent in FY 1990 to make the facility fully operational.

RESPONSE. It will be necessary to re-evaluate and re-engineer the facility's climate control system to make it conform to blueprint specifications. Based on our appraisal of the facility's current condition, several expenditures will have to be made for the facility to be fully operational. These include, approximately: $380,000 for building modifications; $157,000 for a back-up generator; and $225,000 for a back-up boiler. The Agency is still determining specific equipment needs and obtaining cost estimates; actual costs may vary considerably. We estimate that potential expenditures could exceed $1 million.

Mr. **AKAKA**. What is the output of sterile flies that you anticipate the Waimanalo facility will achieve by: 1) June 30, 1990, and 2) September 3, 1990. When do you anticipate that the facility will achieve full output capacity of 500,000,000 sterile flies per week?

RESPONSE. Our current production schedule indicates we will release a total of 350 million sterile flies per week by July 2, 1990, and 500 million sterile flies per week by August 15, 1990.

Mr. **AKAKA**. What is the estimate of the annual cost to operate the Waimanalo facility at full rearing capacity?

RESPONSE. The Waimanalo sterile fly rearing facility's operating costs would be $3.5 million for 1 year at the full production level of 500 million sterile flies per week.

Mr. **AKAKA**. What amounts are contained in the FY 1990 and FY 1991 budget to operate the Waimanalo facility?

Response. There were no new funds provided in the FY 1990 Medfly budget to operate the Waimanalo facility. The $400,000 increase provided was earmarked for the release of sterile flies on Kauai. In effect, this means we must absorb the $1.6 million facility operating costs by reducing Medfly methods development activities, surveillance, and control efforts in Mexico and Guatemala.

The FY 1991 request includes $490,000 for facility operation. This amount only partial funds the facility's operation. The cost of operating the Waimanalo rearing facility in FY 1991 will be over $1.6 million.

Mr. **Akaka**. What is the APHIS estimate of:

(1) the total area of the California medfly outbreak,

(2) the optimum number of sterile Medflies that should be released per week in the area of the California outbreak if bait sprays could not be used.

(3) the density of sterile flies that will be achieved based upon this rate of release,

(4) the actual density per square mile and the rate of release per week achieved in California during January and February, 1990.

Response. The California Medfly outbreak encompasses approximately 1,100 square miles under quarantine, 400 square miles receiving malathion bait spray treatment, and 125 square miles of sterile fly releases, known as SIT.

APHIS would be required to release 525 million sterile flies per week over 525 square miles should bait sprays not be used. However, research has not concluded that SIT alone is effective in eradicating fruit flies when the wild population is high.

The density of sterile flies achieved would be 1 million sterile flies per week per square mile.

During January and February of 1990, actual density was an average of 730,000 sterile flies released per square mile, per week.

Mr. **Akaka**. Based upon the answers to the preceding question, if the optimum release rate exceeds available capacity, indicate what steps APHIS is taking to resolve this shortfall problem.

Response. APHIS is working with the California Department of Food and Agriculture to permit doubling the capacity of the California facility in Hawaii. We will also continue acquiring at least 50 million sterile flies per week from the APHIS-Mexico rearing facility, and could request more flies as needed. The possibility of requesting flies from Guatemala is also feasible.

Mr. **Akaka**. What is the current weekly sterile fly rearing capacity of all APHIS facilities? For the purposes of this question, assume that the Waimanalo facility is fully operational.

Response. The California facility located in Hawaii produces approximately 100 million sterile flies per week. APHIS cooperates with Mexico to support the rearing facility which produces approximately 450 million sterile flies per week. The Guatemala facility has a production level of approximately 115 million sterile flies per week. The Waimanalo facility, fully operational, will produce 500 million sterile flies per week. Total sterile flies produced at all facilities would be approximately 1.2 billion sterile flies per week.

Mr. **Akaka**. Estimate the number of flies that must be released in California throughout FY 1991.

Response. We estimate that the current Medfly infestation will be eradicated by September 1990. If no additional infestations are detected, we will not release any flies in California during FY 1991.

Mr. **Akaka**. How many sterile flies per week has ARS indicated that it needs to operate the Kauai pilot eradication project based upon their 8 year plan?

Response. ARS has indicated that 20 million sterile flies per week will be needed from now until September 1990, 30 million sterile flies per week will be needed in FY 1991, and 50 million sterile flies will be needed in FY 1992.

HAWAII AGRICULTURAL INSPECTIONS

Mr. **Akaka**. What are the results of the APHIS evaluation of the new E-scan equipment versus the X-ray equipment now in use for agricultural inspection? Provide a copy of your written report for the record.

Response. The E-scan machine uses the color green to distinguish between inorganic and organc items, as opposed to the X-ray machines using only black and white images. APHIS currently has four E-scan machines: two are being used in Los Angeles California; one in San Ysidro, California, and one in Miami, Florida. ARS is currently finalizing the evaluation and is expected to release it within the next few months. We anticipate the evaluation to be positive. I would be glad to provide a copy of the report to the Committee upon its completion.

Mr. **Akaka**. What is the current purchase price of E-scan versus traditional X-ray equipment? Do you believe that the additional cost is justified in light of any increase in inspection security?

Response. The traditional X-ray equipment costs approximately $45,000. Advances in technology along with competition in the security field, has allowed several vendors to enter the market introducing color enhancement equal to the E-scan. X-ray equipment with color enhancement is close to $50,000. To modify a traditional X-ray machine with color enhancement would cost about $20,000.

The evaluation of the E-scan machine has not yet been completed by ARS, therefore we do not have the knowlege at this time to decide whether the additional cost would be justified.

Mr. **Akaka**. In FY 1990, $205,000 was appropriated to purchase additional X-ray or E-scan inspection equipment for Hawaii's airports. How will these funds be utilized, what kind of equipment will be purchased, and where will this equipment be sited?

Response. Mr. Chairman, four line scan systems were delivered in January 1990. These four systems are expected to be upgraded to E-scan by the third quarter of 1990. They are located in Honolulu and Wailuku. Three additional X-rays have been requested for FY 1990 but have been put on hold. The purchasing of X-ray equipment has been delayed in order to cover salary costs. Our Agency will have to absorb the 3.6 percent pay costs raise and the Gramm-Rudman-Hollings sequestration of 1.4 percent. Agricultural Quarantine Inspection (AQI) activities are extremely salary intensive. Since maintaining sufficient staffing levels is critical for providing adequate coverage to U.S. agriculture, major equipment purchases have been delayed. If funds are available, the remaining three systems will be ordered by the third or fourth quarter of FY 1990. The Agency has not yet determined which kinds of systems to buy or where they will be placed.

Mr. **Akaka**. By what date will this equipment be in place and operational?

Response. The first four X-ray systems are currently in place and are expected to be equipped with the E-scan feature by the third quarter of FY 1990. Three additional X-ray systems have been requested for this fiscal year. The systems should take approximately 6 to 7 months to deliver from the date of the initial order. The staff should be fully trained and ready to operate the machines when they arrive.

Mr. **Akaka**. How many airline passengers are processed using X-ray systems at Honolulu International Airport during the busiest hour of the day?

Response. On average, 17 flights depart from Honululu International Airport on the busiest hour of the day. Each flight has approximately 200 passengers. In total, there are 3,400 passengers processed in 1 hour using X-ray equipment.

Mr. **Akaka**. What are the advantages of using X-ray or E-scan equipment in busy airport locations compared to human inspections? How do results of mechanical inspecton compare to human inspection?

Response. Even through the study on X-ray usage has not been finalized our Agency has found that we can inspect more baggages in less time when we use X-ray or E-Scan equipment as opposed to only human inspections.

The inspectors appear to be intercepting approximately the same amount of prohibited material. Athough the quantity of intercepted material remains the same, inspectors report that the quality of their inspections has improved. They have more confidence in their inspections with the X-ray equipment. Simply stated, we can examine a larger quantity of baggage in a shorter period of time with a higher level of confidence.

Mr. **Akaka**. What funds are contained in the FY 1991 budget for the purchase of X-ray or E-scan equipment for Hawaii airports?

Response. The FY 1991 budget contains no funds specifically earmarked for more X-ray or E-scan equipment for Hawaii airports.

RAT DAMAGE IN HAWAII

Mr. **Akaka**. The report to accompany the FY-90 bill provides "$240,000 for a cooperative agreement with the Hawaiian Sugar Planters Association (HSPA) for a program to control rat damage to sugarcane and macadamia nuts. This amount is in addition to the amounts necessary to operate the Hawaii Field Office."

Identify the amounts expended for the Hawaii Field Office in FY 1988 and FY 1989, the amount to be expended in FY 1990, and the amount contained in the FY 1991 budget request for this activity. If in any fiscal year the office was open for only part of the fiscal year, identify an annualized amount for that year.

Response.

[The information follows:]

Fiscal year:	*Amount*
1988 actual	$58,555
1989 actual	62,400
1990 estimate	74,000
1991 estimate	88,000

Mr. **Akaka**. What activities are being performed by the Hawaii Field Office?

Response. The majority of the work conducted through the ADC office is aimed at preventing potential bird/aircraft strikes at airports. This involves technical assistance to airport personnel and operational programs to keep birds off runways. The balance of our field operation works at reducing losses to the State's aquaculture industry caused by fish-eating birds.

Mr. **Akaka**. What rat control work will be undertaken in FY 1990 and what work remains to be accomplished?

Response. Research being conducted by the Hawaii Field Station of the Denver Wildlife Research Center (DWRC) in FY 1990 consists of laboratory trials of a candidate rodenticide, Cholecalciferol, to evaluate efficacy for controlling Norway rats. When a promising rodenticide is identified, field trails will be conducted to evaluate efficacy and to develop other data needed for registrations. Research that remains to be accomplished is to idenfity, evaluate, and register an effective rodenticide for controlling Norway rats in sugarcane fields and black rats in macadamia nut orchards.

SHARWILL AVOCADOS

Mr. **Akaka**. What is the status of the proposal to amend the regulations to permit Sharwil avocados to any destination in the U.S.?

Response. The draft final rule to amend the regulations that would permit Sharwill avocados to any destination in the U.S. is under review within the Department.

Mr. **Akaka**. By what date will this regulation be published?

Response. The Department has put a hold in the regulation pending the outcome of the Medfly emergency in California. After the Department has cleared the regulation and the Office of Management and Budget has approved the regulation, it will be published. At this time, it is unclear when this date will be.

CAPMED PROGRAM

Mr. **Akaka**. What is the status of the CAPMED initiative?

Response. The CAPMED initiative was proposed by the United Nations Food and Agriculture Organization, known as FAO, to address the needs of Central American countries to further develop their agriculture. FAO has been unable to generate the necessary donor support to implement the program. Should adequate funding be made available to FAO through international donors, including the U.S., APHIS would be available to provide technical support for the project.

BUNCHY TOP BANANA VIRUS

Mr. **Akaka**. The conference report to accompany the Department of Agriculture appropriations for FY 1990 provides as follows:

Bunchy top banana virus, a serious disease that has nearly destroyed the banana industry in Guam and Australia, is posing a serious threat in Hawaii since its introduction in July 1989. Using funds available in fiscal year 1990, the conferees will expect APHIS to provide assistance to the State of Hawaii in its efforts to identify outbreaks and eradicate this disease as well as enforce necessary quarantines to prevent reintroduction of this disease.

Mr. **Akaka**. Describe the nature of this disease, the seriousness of the threat, and the possible means of eradication or control of this virus.

Response. Banana bunchy top is an aphid-transmitted virus disease that can severely limit banana production if not controlled. An eradication program would include all of the following elements: comprehensive surveys to locate all infected banana plants; destruction of all infected plants as well as destruction of all adjacent plants in a 50-foot radius; strict regulation of the nursery industry to prevent the re-establishment of infestations; and the establishment of regulations in the State of Hawaii to prevent the movement of infected plants to other islands. Possible means of control include: prompt removal of all infected plants; the use of chemcial insecticides to control aphids, as used in Australia and Taiwan; and growing bananas as an annual crop and clearing the fields after each crop.

Mr. **Akaka**. What funds will APHIS expend in FY 1990 in carrying out this directive?

Response. APHIS staff traveled to Hawaii in January, 1990 to review the banana bunchy top program with the Hawaii Department of Agriculture. The Agency does not know at this time what funds might be needed for this program; this depends on what steps the Hawaii Department of Agriculture plans to take to conduct survey and control activities, and to regulate nurseries.

Mr. **Akaka.** What efforts has APHIS planned or executed to provide assistance to the State of Hawaii in its efforts to identify outbreaks and eradicate this disease?

Response. In January 1990, APHIS staff visited farms in Hawaii and reviewed the situation. Agency staff provided recommendations on regulatory and control steps that the State of Hawaii would have to take to initiate an eradication program. The Hawaii Department of Agriculture is currently making a decision on this matter.

Mr. **Akaka.** What efforts has APHIS planned or executed to enforce necessary quarantines to prevent reintroduction of this disease from other countries?

Response. The Agency feels that current APHIS quarantine measures would be effective to prevent re-introduction of the disease.

Mr. **Akaka.** In his January 10, 1990 address at the dedication of the Waimanalo sterile fly rearing facility, Deputy Secretary Parnell made the following statement: "The uncontrolled presence of this pest in the United States could severely disrupt the $12.3 billion fruit and vegetable industry. Estimated annual losses attributable to an established fruit fly infestation would exceed $800 million." How did APHIS arrive at this estimate?

Response.

[The information follows:]

RANGE OF COSTS

[In thousands of dollars]

	Low	High
Estimated field loss value of crop	$303,787	$303,787
Cost of field treatment	74,015	74,015
Loss in export revenue due to trade embargo	326,671	326,671
Range of export quarantine treatment damage costs	4,130	13,561
Cost of export quarantine compliance treatments	35,062	35,062
Cost of eradicating spot infestation in North Carolina, Arkansas, and Oregon	2,400	2,400
Total cost	746,065	755,496
10 Percent for contingency losses	74,607	75,550
Grand total	820,672	831,046

Note: (Excerpted from the "Economic Analysis of the Mediterranean Fruit Fly Program in Guatemala" prepared by APHIS in August 1989.)

Mr. **Akaka.** What has been the APHIS policy on hours of coverage for cargo inspection for airlines, freight forwarders, exporters, etc. in Hawaii prior to April 1, 1990?

Response. We have decided to implement the change in policy beginning with Fiscal Year 1991 rather than April 1, 1990. Prior to October 1, 1990, cargo inspections have been conducted between 7:00 am and 10:00 pm, Monday through Saturday, on regularly scheduled time and 8:00 am to 5:00 pm, Sundays and holidays, on government paid overtime. This time period coincided with the hours that the cargo inspection facility was open but was outside the standard 8:00 am to 4:30 pm tour of duty.

Mr. **Akaka.** What policy does APHIS plan to institute with respect to hours of coverage for cargo inspection in Hawaii after April 1, 1990?

Response. After October 1, 1990, the hours of coverage will be 8:00 am through 4:30 pm, Monday through Friday, except on holidays. Coverage for holidays, Saturdays, Sundays and hours before 8:00 am and after 4:30 pm on regular weekdays will be done on reimbursable overtime. The overtime cost, a minimum of four hours per employee, will be charged to the airline, freight forwarder, or exporter making the request. In cases where there are a number of requests from several sources, the charges will be prorated. The inspections will be by appointment, arranged at least four hours in advance. This policy is more effective because it transfers the inspection costs from the general taxpayers to the user for whom the services are provided.

Mr. **Akaka.** Identify all other states that have been notified of such a policy change. Further identify the effective dates of policy changes for other states.

Response. All other states have been using this policy since August 28, 1950.

Mr. Akaka. How long has the policy prior to April 1, 1990 been in effect? State the date that the pre-April 1, 1990 policy became effective.

Response. We have provided these inspections free of charge the entire time we have had an Agricultural Quarantine Inspection program in Hawaii. This has been approxmiately 70 years.

Mr. Akaka. Based upon the actual number of requests of coverage for cargo inspections before 8:00 am and after 4:30 pm in the year ending December 31, 1989, calculate the charges that would have resulted if the April 1, 1990 policy were in effect during this one year period. Be certain to calculate charges based upon the 4 hour minimum per request.

Response. I will be happy to do so.

[The information follows:]

In response to your request we have calculated the estimated cost of coverage for cargo inspections before 8:00 am and after 4:30 pm during calendar year 1989 in Honolulu. We estimate that the cost would have been approximately $128,892. In making this estimate, we have assumed that a number of requests will be made from multiple sources and the charges will be prorated among the various companies for which service is provided. We believe that the actual cost for 1990 will be significantly less than $128,000 because many exporters are likely to alter their shipping schedule to take advantage of the "free" service during the 8:00 am to 4:30 pm Monday through Friday time frame.

Mr. Akaka. What is the nature and amount of the budget shortfall that APHIS is experiencing that has precipitated this policy change. Identify any account where a shortfall exists which must be replenished and the reason for the shortfall.

Response. We do not anticipate a shortfall by the end of the fiscal year. However, our funding level was reduced in FY 1990 by the 1.4% Gramm-Rudman-Hollings sequestration, resulting in an overall reduction of $896,000 in the AQI program. In addition, we have had to absorb $3 million in pay cost increases for Federal employees.

Mr. Akaka. What is the basis for the proposed change?

Response. The basis for the proposed change is to have all States using the same policy and to save the U.S. government the cost of overtime as well as premium pay on Sundays and Holidays.

Mr. Akaka. Provide copies of the pre-April 1 and post-April 1 policies.

Response.

[The information follows:]

Copies of the 1950 policy are no longer available. The following is the Fiscal Year 1991 policy that Hawaii will implement.

On October 1, 1990, coverage for cargo inspections will be provided from 8:00 am to 4:30 pm, Monday through Friday, except for holidays. Coverage for holidays, weekends, and hours before 8:00 am and after 4:30 pm on weekdays will be done on reimbursable overtime.

PSEUDORABIES

Mr. Smith. In fiscal 1990 we provided increased funding for the pseudorabies program over the 1989 level, yet the states actually received less money due to a large deduction for administrative support.

Tell us the total dollar amount and the percentage of the amount appropriated that were allocated to administrative cost for this program in 1989 and also 1990.

Response. APHIS defines administrative support to include the office of the administrator, legislative and public affairs, and management and budget support. In FY 1989, the administrative costs allowable to the pseudorabies program totaled $131,000, which translates to 4.9 percent of the program's appropriation. For FY 1990, the corresponding figures are $162,000 and 4.9 percent, respectively.

Mr. Smith. If we do not impose a limit on administrative cost for this program, what percentage of the amount appropriated by the Congress do you expect to go to administrative support in fiscal 1991?

Response. We would expect it to be in line with amounts allocated in recent years. It would not exceed 5.15 percent.

Mr. Smith. If we increase funding for the pseudorabies porogram, is it necessary for the administrative costs to also increase?

Response. As a general rule yes, although not necessarily in exact proportion to the amount of the funding increase.

Mr. Smith. If your answer to this question is yes, why?

Response. As funding and subsequent program activity increases, the level of administrative and program support required to carry out the program increases as well. As you know, the APHIS budget includes 39 different line item programs. Pseudorabies is just one example. There are no separate line items for such things as administration, regional offices, training, equipment, and information support. Under the present budget format, these costs, which support all the field programs, must be financed from each line item. There are a number of core functions that APHIS must carry out to assure national agriculture protection regardless of whether or not we are involved in programs to control or eradicate particular pests or diseases. These core functions include pest and disease exclusion, surveillance and detection, laboratory and technical support, and quick reaction capability.

BRUCELLOSIS

Mr. WATKINS. What is the status of brucellosis eradication efforts in the U.S.?

RESPONSE. In Fiscal Year (FY) 1989, the program achieved a major milestone as the southern portion of Florida, the only remaining Class C area, was elevated to Class B status. There are now 28 Class free status States, 16 Class A status States, and 6 Class B status States. The number of brucellosis affected herds and reactor cattle nationwide reached all-time annual lows. Only 38,000 reactor animals were discovered in FY 1989, 21 percent fewer than the 48,000 detected in the previous year. This reduction in reactor animals found occurred despite a 1.2 percent increase in the number of cattle tested.

Mr. WATKINS. I understand that substantial progress has been made in the past year. What is the number of infected herds this year compared to last year?

RESPONSE. Only 2,502 infected or reactor herds were found in FY 1989, a decrease of 29 percent from the 3,514 herds detected in FY 1988. Only 1,231 herds were under quarantine at the end of 1989, a 40 percent drop from the end of 1988.

Mr. WATKINS. What is the current classification of states infected with the disease? What states are expected to make advancements this year?

RESPONSE. As of March 12, 1990, the State classifications were as follows:

Class Free: Alaska, Arizona, Connecticut, Delaware, District of Columbia, Hawaii, Indiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Utah, Vermont, Virgin Islands, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Class A: Alabama, California, Colorado, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Missouri, Nebraska, Nevada, New Mexico, Oregon, Puerto Rico, South Dakota, and Tennessee.

Class B: Arkansas, Florida, Louisiana, Mississippi, Oklahoma, and Texas.

Class C: None.

We expect to see at least three States improve in status during the remainder of FY 1990. Idaho and Oregon are expected to move from Class A to Class Free, and Arkansas from Class B to Class A status.

By the end of FY 1991, we anticipate that all remaining Class B States—Florida, Louisiana, Mississippi, Oklahoma, and Texas—will have attained Class A status.

Mr. WATKINS. How much money does your budget reflect for brucellosis for FY 1991? Why did you not propose adequate funds to fund fully the expedited clean-up program?

RESPONSE. For FY 1991, we are requesting $64,553,000 for the brucellosis program. An increase of this magnitude was not possible given the constraints on the Federal budget.

Mr. WATKINS. What does your capability statement indicate for the brucellosis program for FY 1991 provided that funds were made available by the Congress.

RESPONSE. At the proposed funding level and with continued funding at the $65 million level in later years, we anticipate that the acceleration of key activities such as depopulation, State program technical reviews, primary and secondary surveillance, adult vaccination, area testing, and increased training, will enable all States to achieve Class Free status within 8 years.

Mr. WATKINS. Given the fact that we are close to eradicating this disease, what new strategies will be utilized for final clean-up by APHIS and the State cooperators?

RESPONSE. We intend to use proven eradication strategies such as depopulation, improved surveillance, whole herd vaccination, and in-depth epidemiology to the fullest extent possible. In addition, we will incorporate new vaccines or tests into the program as they are developed and shown to be an improvement over the present technology.

Mr. WATKINS. Of the increase given to the brucellosis program in FY 1990, how much of the funds were put into the field? Into administration?

Response. In FY 1990, the brucellosis program received an increase of $6,086,000. Of that amount, $4,168,000 has been put into field operations to be used for rapid completion.

Of the FY 1990 increase, $2 million was put into administrative support and program direction and support. Agency administrative support and program direction and support include: Agency level management and budget offices, Congressional liaison and regulation development, program planning and policy development, recruitment and development, program staff operations, program management offices, and regional offices. Included in recruitment and development is $526,000 for the training of veterinarians.

Mr. **Watkins.** Could you describe how APHIS' central warehousing purchases have impacted the States either positively or negatively?

Response. The cost savings and improved management practices that result from the central warehousing system have a positive impact on the States. Major savings result from consolidating the inventory. Consolidation avoids duplication of inventory, improves quality control, and lowers shipping costs. In addition, it reduces the need for leased storage space in every State. The cost to operate APHIS' decentralized supply distribution system was $3.3 million, excluding the inventory. In comparison, the operating cost for the warehouse for FY 1990 is estimated at $1.3 million, including shipping costs. Prior to the centralized system, 65 personnel were responsible for storage and distribution, supply management, and purchasing. Now under the central system, less than 20 personnel perform the same tasks.

FY 1990 is the second year the centralized warehouse is available to all States through an agreement between APHIS and the Department of Commerce. We experienced some growing pains in FY 1989. Procurement and distribution problems with a few critical stock items negatively affected program operations. Those problems had three causes: confusion caused by changing systems, inadequate levels of quality assurance, and inexperience in determining minimum stock levels. We have reviewed and analyzed these problems, and have taken corrective measures. There has been a noticeable decline in complaints from customers during the current fiscal year. To ensure a top quality system for the long term, we are conducting a formal Agency review of the central warehouse operation.

Mr. **Watkins.** Has more money been put into brucellosis annually than the amount appropriated?

Response. No, it has not.

SCREWWORM ERADICATION

Mr. **Watkins.** Given the democratic reform movement in Central American countries, what new strategies will the Department be utilizing to expand the screwworm barrier further south?

Response. The democratic movement in some Central American countries should facilitate the screwworm eradication program. We will be evaluating their progress towards democratization and exploring whether new strategies can be utilized in moving the screwworm barrier.

Mr. **Watkins** How much money does your budget reflect for the screwworm program in FY 1991?

Response. The budget request for screwworm for FY 1991 is $33,391,000, an increase of $1,784,000 over FY 1990.

Mr. **Watkins.** What does your capability statement indicate for the screwworm program for FY 1991 provided that funds were made available by the Congress?

Response. An increse of $1,784,000 has been requested for FY 1991. This increase will enable the screwworm program to partially meet increased operating costs such as air operations and electricity, which have greatly increased in the past few years. In FY 1991, the Agency intends to continue the barrier maintenance in Mexico, complete the final stages of eradication in the Yucatan Peninsula, and eradicate screwworm from the Peten area of Guatemala.

Mr. **Watkins.** It is my understanding that there have been isolated cases of the screwworm in the U.S. and that outbreaks have occurred in other international countries not part of the western hemisphere. Could you please expound on these cases?

Response. Outside of the western hemisphere, a self-sustaining screwworm population has established itself in Libya. It was first confirmed to exist in North Africa in December 1988, and is currently limited to a small zone around Tripoli. Nearly 2,000 positive cases of screwworm were confirmed during the last 6 months of 1989.

Additionally, within the last year, an infected horse entered Puerto Rico from Venezuela and an infected soldier from the invasion of Panama was medivaced to Texas. In both cases viable larvae were detected in the wound.

Mr. WATKINS. Is it possible that the U.S. might become reinfected without additional funds?

RESPONSE. Spread of the screwworm to the U.S. is quite possible if there was an outbreak behind the barrier or a major equipment failure at the sterile fly production facility in Mexico. We are particularly concerned about the condition of the facility in Mexico. The facility is 14 years old and in serious need of repair. The estimated cost to renovate the facility is $14 million; and would include rehabilitating the heating, ventilation and air conditioning systems, relining one incinerator, reroofing the facility, replacing the entire plumbing system, and replacing the racks on the rearing floor.

Biography
Bobby R. Acord
Acting Deputy Administrator, ADC

Bobby R. Acord was named Acting Deputy Administrator, Animal Damage Control, Washington, D.C., on September 24, 1989. In this position, he has responsibility for directing the national program in all 50 States. The program is engaged in protecting agriculture, human health and safety and natural resources from damage by wildlife. Mr. Acord has previously served as Associate Deputy Administrator, ADC, and Director of Animal Damage Control's Western Region, Denver, Colorado. There he directed program activities in the 17 Western States, Alaska and Hawaii. Prior to his service in the Western Region, Mr. Acord was Assistant Deputy Administrator for the Animal Damage Control program in Washington, D.C.

Mr. Acord joined the Department of Agriculture in 1966 as a meat grader with the Agricultural Marketing Service. After serving in several field stations in the West and Mid-Western States, he moved to the Headquarters staff in Washington, D.C. In 1973 he joined the Animal and Plant Health Inspection Service where he held several management positions of increasing responsibility within Administrative Management, before heading up the APHIS Legislative Affairs Staff.

Mr. Acord was born in Beckley, West Virginia, on September 14, 1942, and worked on his parents' farm during his teenage years. He is a graduate of West Virginia University where he earned a Bachelor of Science degree in Animal Science. While attending college, he worked on sheep research projects involving forage digestability. After completing college, he served 3 years in the U.S. Army Veterinary Service.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Statement of Dr. James W. Glosser, Administrator, Animal and Plant Health Inspection Service, before the House Subcommittee on Rural Development, Agriculture, and Related Agencies.

Mr. Chairman and members of the Committee, I appreciate the opportunity to present our Fiscal Year 1991 budget request and to report to you on our continuing efforts to protect American agriculture. I would like to take some time today to report briefly on our Agency Mission, our recent accomplishments, major issues, and future plans.

First, let me introduce some key members of our management team. With me are Mr. Larry B. Slagle, the Associate Administrator; Dr. Lonnie J. King, Deputy Administrator for Veterinary Services; the Acting Deputy Administrators, Mr. Richard R. Backus, for Plant Protection and Quarantine; Mr. Bobby R. Acord, for Animal Damage Control; and Mr. Michael C. Gregoire, Acting Director for the Budget and Accounting Division.

AGENCY MISSION

The mission of the Animal and Plant Health Inspection Service (APHIS) is to protect American agriculture by providing leadership in ensuring the health and care of animals and plants, to improve agricultural productivity and competitiveness--to keep it safe, make it better, cheaper, more efficient, and thus, more economically sound and successful, thereby contributing to our

Nation's economy and the public health. APHIS activities fall within five major functional areas: 1) pest and disease exclusion; 2) plant and animal health monitoring; 3) pest and disease management; 4) animal care; and 5) scientific and technical services.

PEST AND DISEASE EXCLUSION

To prevent the introduction of foreign plant and animal pests and diseases which are harmful to our country's agriculture, APHIS carries out inspection and quarantine activities at U.S. ports-of-entry. To ensure that foreign agricultural products destined for the United States do not present a risk to U.S. agriculture, APHIS develops and conducts preclearance programs. Further, APHIS engages in cooperative programs with other countries to control pests of imminent concern to the United States and to strengthen foreign plant protection and quarantine organizations. APHIS certifies plants and plant products for export and regulates imports and exports of designated endangered plant species. APHIS facilitates exports by issuing certification that U.S exports comply with foreign animal and plant health regulations and by negotiating changes in regulations that are not biologically based.

PLANT AND ANIMAL HEALTH MONITORING

APHIS accomplishes plant and animal health monitoring through two disease detection programs. The purpose of the first, the animal disease detection program, is to protect and monitor the health of the Nation's livestock and maintain the capability to rapidly eliminate outbreaks of foreign animal diseases should they occur. This is accomplished through diagnostic efforts, surveillance of domestic and foreign animal diseases, and by surveys of domestic livestock conditions. An important component of the program is the National Animal Health Monitoring System (NAHMS). This is a cooperative effort of the Federal and State governments and industry producers.

The second, the pest detection program, has two main functions: 1) to quickly discover foreign plant pests to prevent widespread agricultural damage and reduce pest control costs; and 2) to monitor the status of the Nation's endemic plant pests and provide information to support the certification of U.S. agricultural exports. APHIS works in cooperation with the 50 States in a project called Cooperative Agricultural Pest Survey, of which the National Agricultural Pest Information System is a component.

PEST AND DISEASE MANAGEMENT

In cooperation with the States, APHIS conducts programs to prevent, detect, and eradicate pests and diseases which are harmful to agriculture. Interstate shipments of plants, livestock, and related materials are monitored and regulated to prevent the spread of disease. APHIS also protects agriculture from detrimental animal predators through identification, demonstration, and application of the most appropriate control methods.

ANIMAL CARE

Under the Animal Welfare Act, APHIS is responsible for ensuring the humane care and treatment of warm blooded animals used for research, exhibition, or sold wholesale as pets, and ensures the humane care of regulated animals when transported in interstate and intrastate commerce.

APHIS is also responsible for the enforcement of the Horse Protection Act of 1970. The Act prohibits the showing or selling of sored horses.

SCIENTIFIC AND TECHNICAL SERVICES

APHIS develops methods to control animals and pests that are detrimental to agriculture, other wildlife, and public safety. The Agency under its broad authority to protect plant and animal health has established a regulatory structure for bringing the benefits of genetic research to the marketplace, while protecting against the release of potentially harmful organisms into the environment.

APHIS also conducts diagnostic laboratory activities that support the Agency's animal disease prevention, detection, control, and eradication programs. Further, it ensures that the veterinary biologicals developed for combatting disease are potent, safe, pure, and efficacious.

RECENT ACCOMPLISHMENTS

Agricultural Quarantine Inspection

The agricultural quarantine inspection program is the Nation's first line of defense in preventing agricultural pests and diseases from entering into the United States. The program's workload continues to increase as the volume of cargo and amount of international air and sea passenger traffic increases: 34 million passengers in FY 1989 versus 27.2 million in FY 1984. In addition, approximately 54 million automobiles entered the U.S. this year from Mexico and Canada, an increase of approximately 1 million over a year ago, all with the potential of introducing agricultural pests. In FY 1989, 329 million inspections yielded 2.7 million interceptions.

Brucellosis

The effectiveness of our brucellosis program progresses. At the beginning of FY 1990, there were 27 States plus the District of Columbia and U.S. Virgin Islands, in Class Free; 17 States, plus Puerto Rico, in Class A; and 6 States in Class B. Southern Florida, the only remaining Class C area, was elevated to Class B status on June 8, 1989, and Kentucky improved its status to Class A. From September 30, 1988, to September 30, 1989, the number of quarantined herds dropped 40 percent, with substantial improvement occurring in all of the Class B States. In FY 1989, there were 2,502 new infected herds nationwide compared to 8,483 in FY 1984. The number of herds under quarantine as of December 31, 1989, were 1,411 compared to 6,099 in 1984.

At the same time, during 1989, West Virginia became the 33rd State to earn validated free status in the swine brucellosis program.

Boll Weevil

The boll weevil program has also made good progress. During 1989, the Southeastern Boll Weevil Eradication Foundation did experience some financial difficulties. This was due in part to increased infestations resulting from a warm winter and frequent rains during the pesticide application season. As a result, an emergency was declared and U.S. Department of Agriculture funds were advanced to the Foundation to continue operations. Efforts are now underway to put the program on a sound financial basis; and a strong Federal-State-industry commitment to the success of this program continues. Last year we saw a 35 percent reduction in the average number of weevils per acre compared to the weevil population at the end of 1988 season. The program has already eradicated the boll weevil from Virginia, North Carolina, and 95 percent of South Carolina. Growers in the eradicated area report substantial economic benefits as a result of this program.

The High Plains program has been successful in preventing the boll weevil from spreading into the non-infested areas of west Texas from the rolling plains area to the South and West. In 1988, this cooperative control program trapped 12,314 weevils, compared to 8,022 in 1989.

In the Southwest the original eradication area was expanded in FY 1988 to include central Arizona and northern Mexico near the Arizona border. Traps were increased to 64,000 in the FY 1989 program (14,000 more than in FY 1988); still the number of boll weevils captured was 92 percent less than the previous year at the same time. Significantly, no weevils were captured in California in 1989.

Biotechnology

Biotechnology has emerged as a force with the potential to improve existing products and spawn new technologies with tremendous benefits for American agriculture. Since the program's inception, the Agency has issued 528 permits to facilitate importation, interstate movement, and field testing of biotechnology products. Thirty-five product licenses have been issued for veterinary biological products produced through biotechnology, including vaccines with companion diagnostic kits. These products hold great promise for enhancing the Agency's disease control and eradication programs. Increasingly, companies are field testing products which should improve the productivity of large scale commercial crops such as soybeans, corn, rice, alfalfa, and cotton. In the international arena, the Agency has worked to encourage the development and adoption of consistent oversight procedures for the field testing and commercialization of the products of biotechnology.

ISSUES

APHIS international programs are designed to protect and promote U.S. agriculture by maintaining a presence in foreign countries which are significant agricultural trading partners and may also be potential sources of economically-dangerous agricultural pests and diseases. Program methods include: surveillance, inspection, quarantine, vaccination, and emergency preparedness for foot-and-mouth disease; one of the most devastating of livestock diseases. Our approach requires several strategies ranging from international harmonization of regulations to the establishment of disease-free zones.

Protecting American agriculture from exotic pests has become increasingly more difficult. International trade and travel have increased significantly. In addition, in the last decade plant importations have increased by 56 percent, trade in commercial birds by 111 percent, and air passenger traffic by

126 percent. Immigration from Southeast Asia, Central America, and South America has increased markedly as well, thus heightening the potential of introducing exotic organisms from those areas of the world. Adding to our exposure are recently negotiated trade agreements and continuing efforts in the negotiations on the General Agreement on Tariffs and Trade, which seek to eliminate all market access barriers including minimizing the adverse effects of plant and animal health regulations.

Current infestations of the Medfly and oriental fruit fly in California illustrate the potentially high economic threat of more than 2,500 exotic insects, plants and animal diseases, weeds, and vertebrate pests.

The Medfly and oriental fruit fly are two of the world's most destructive pests of fruits, nuts, and vegetables. Failure to eradicate these infestations in the continental United States, would severely disrupt the $12.3 billion fruit and vegetable industry and could cost $500 million annually to the loss of export markets.

This latest outbreak in California marks the fourth consecutive year that we have faced significant fruit fly outbreaks in California. The current outbreak may approach the seriousness of the FY 1981 infestation which cost the Federal Government and the State of California over $100 million to eradicate. As we have advised the Committees, the scope of the infestation has caused the Secretary to declare an emergency, for which $15 million has been apportioned. The source of the infestation is unknown, but uninspected first class mail from Hawaii and smuggling of fruit from Central America and the Pacific rim countries are suspected.

APHIS has also established a committee to examine the Agency's efforts to prevent the introduction and establishment of fruit flies and other exotic pests. Their task will not be easy. APHIS is faced with increasing constraints on its ability to respond promptly to threatening exotic organisms. Environmental constraints, challenges to pesticides, and the lack of alternative methods, all affect our ability to respond.

Salmonella enteritidis (SE) is emerging as a serious agricultural and animal health problem with related public health ramifications. In the last 3 years alone, over 150 confirmed domestic outbreaks in humans, involving thousands of people, have been traced to eggs infected by SE. A different and more deadly strain has been discovered in the United Kingdom.

Industry losses are increasing. For example, SE has begun to disrupt the $3.2 billion egg industry and the $15 billion poultry industry. Consequently, $6.8 million has been transferred from CCC for a program focusing on breeder and multiplier flocks, as well as commercial flocks implicated in human health incidents.

Public concerns about animal care and the environment affect many APHIS programs. These are growing issues which daily affect our decisionmaking and add to the costs of conducting our programs.

FY 1991 BUDGET

The proposed FY 1991 budget for salaries and expenses, based on current law, is $368 million, an increase of $20.6 million from the FY 1990 post sequester level of $347.4 million. Based on proposed legislation, however, the budget request is $289 million, a decrease of $58.4 million from the FY 1990 level. The proposed legislation would place the entire AQI program and a portion of the veterinary diagnostics and import-export programs on a user-fee basis. For the buildings and facilities account, we are requesting $25.4 million, an increase of $11.8 million from the FY 1990 level of $13.6 million. Of this increase, $5 million will fund the APHIS portion of the APHIS and ARS laboratory consolidation into one building at the Plum Island Animal Disease Center. There are significant cost savings to be achieved after consolidation.

For the pest and disease exclusion function, we propose an increase of $10.4 million in the AQI program to increase staffing at high-risk ports-of-entry and expand the use of detector dogs and X-ray machines. APHIS must increase its capability to develop new technologies and to assess biological risk systematically in making consistent and supportable risk-management decisions. A $702,000 increase is included in the Medfly program to provide funding for the Waimanalo, Hawaii, sterile fruit fly rearing facility operations to produce flies for test eradication efforts on Kauai and for use in emergency outbreaks. For the screwworm program, we propose an increase of $1.8 million to continue operations in Mexico, complete eradication in the Yucatan, and continue eradication activities in Belize and Guatemala.

In the plant and animal health monitoring functions, we request an increase of $3.9 million for the animal disease detection program to expand NAHMS to acquire and assess the information necessary to respond to producer and public needs.

In the pest and disease management programs function, we request an increase of $2.2 million for ADC operations to support increased operating costs and to deal with increasingly complex problems of wildlife damage management. We propose an increase of $1.9 million in the biocontrol program to assist State cooperators in rearing, field collecting, and redistributing natural enemies of the Russian wheat aphid and leafy spurge, and to expand the developing and testing of additional biological control agents. In the brucellosis program, we propose a $2.6 million increase to fund operational costs. We propose a $2.1-million reduction in the animal health compliance and enforcement program, reflecting the changing emphasis on animal health monitoring with a reduced focus on inspections.

In animal care, an increase of $1.2 million in animal welfare is requested to hire additional field inspectors to implement regulations, and to purchase equipment.

In scientific and technical services area, we propose a $2.6 million increase in veterinary diagnostics to develop and evaluate new diagnostic procedures with particular emphasis on rapid and accurate identification of foreign animal and poultry diseases. For biotechnology, we request $1.8 million to fund continuing increases in workload.

CONCLUSION

Mr. Chairman, I would like to conclude by saying that our plans for this year and the issues facing APHIS offer considerable challenge. I am confident progress will be made. On behalf of the APHIS organization, I thank you and the Committee for your support through the years. I will be happy to answer any questions.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Purpose Statement

The Animal and Plant Health Inspection Service (APHIS) was established by the Secretary of Agriculture on April 2, 1972, under the authority of the Reorganization Plan No. 2 of 1953 and other authorities. The primary mission of APHIS is to protect the animal and plant resources of the Nation from diseases and pests in order to preserve the marketability of U.S. agricultural products within this country and abroad. The mission is carried out under five major functional components:

1. Pest and Disease Exclusion: The Agency conducts inspection and quarantine activities at U.S. ports-of-entry to prevent the introduction of exotic animal and plant diseases and pests. The Agency also participates in inspection, survey, and control activities in foreign countries to reinforce its domestic activities.

2. Plant and Animal Health Monitoring: The Agency conducts programs to assess animal and plant health and to detect endemic and exotic diseases and pests.

3. Pest and Disease Management Programs: The Agency carries out programs to control and eradicate infestations and animal diseases that threaten the United States; reduce agricultural losses caused by predatory animals, birds, and rodents; provide technical assistance to other cooperators such as States, counties, and farmer or rancher groups, and foundations; ensure compliance with interstate movement and other disease control regulations within the jurisdiction of the Agency.

4. Animal Care: The Agency conducts regulatory activities which ensure the humane care and treatment of animals and horses as required by the Animal Welfare and Horse Protection Acts. These activities include inspection of certain establishments which handle animals intended for research, exhibition, and as pets, and monitoring of certain horse shows.

5. Scientific and Technical Services: The Agency performs other regulatory activities, including the development of standards for the licensing and testing of veterinary biologicals to ensure their safety and effectiveness; diagnostic activities in support of the control and eradication programs in other functional components; applied research aimed at reducing economic damage from vertebrate animals; development of new pest and animal damage control methods and tools; and regulatory oversight of genetically engineered products.

As of September 30, 1989, there were 4,873 permanent full-time and 1,019 part-time employees. Of the total, 725 full-time employees and 85 part-time employees work in central offices in the Washington metropolitan area. The field activities are managed on a national basis through 10 regional offices and 119 field offices. Much of the work is conducted in cooperation with State and local agencies, private groups, and foreign governments. Most of the Service's work is conducted at field locations in the 50 States, Puerto Rico, Virgin Islands, Mexico, Central America, the Caribbean, Western Europe, Asia, and Africa.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Available Funds and Staff-Years

1989 Actual and Estimated, 1990 and 1991

	1989 Actual		1990 Estimated		1991 Estimated	
	Amount ($)	Staff-Years	Amount ($)	Staff-Years	Amount($)	Staff-Years
Salaries and Expenses....	331,207,000	5,397	347,366,000	5,453	367,950,000	5,523
Buildings and Facilities.	2,546,000	--	13,608,000	--	25,396,000	--
Total................	333,753,000	5,397	360,974,000	5,453	393,346,000	5,523
Obligations under other USDA Appropriations:						
Agricultural Cooperative Service for administrative support....	132,399	3	132,500	3	132,500	3
Agricultural Marketing Service for administrative support and tobacco sample analysis..................	2,899,851	16	2,900,000	16	2,900,000	16
Agricultural Research Service for administrative support, predator control, Veterinary Services, and Plant Protection and Quarantine.	115,253	3	115,000	3	115,000	3
Agricultural Stabilization and Conservation Service for contamination and residue testing...........	71,000	--	71,000	--	71,000	--
Cooperative State Research Service for administrative support..............	39,864	1	40,000	1	40,000	1
Farmers Home Admin. for administrative support....................	5,000	--	5,000	--	5,000	--
Federal Grain Inspection Service for administrative support..............	1,170,341	8	1,200,000	8	1,200,000	8
Food Safety and Inspection Service for administrative support....................	13,441	--	14,000	--	14,000	--
Human Nutrition Informa. Service for administrative support..................	47,484	1	48,000	1	48,000	1

	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Office of International Cooperation and Dev. for employee services and training and animal damage control..................	1,179,240	10	1,200,000	10	1,200,000	10
Office of Inspector Gen. for administrative support...................	17,192	--	17,000	--	17,000	--
Office of Transportation for administrative support...................	135,416	3	135,000	3	135,000	3
Packers and Stockyards Administration for administrative support....	241,013	1	241,000	1	241,000	1
Soil Conservation Service for administrative support...................	3,608	--	4,000	--	4,000	--
Total, Agriculture Appropriations.......	339,824,102	5,443	367,096,500	5,499	399,468,500	5,569
Other Federal Funds:						
Department of Energy for animal damage control activities................	72,027	1	72,000	1	72,000	1
Department of Health and Human Services for sharing a vehicle.........	2,500	--	2,500	--	2,500	--
Department of the Interior for animal damage control and research...............	130,587	2	130,000	2	130,000	2
Department of Treasury for shuttle service.......	61,631	2	62,000	2	62,000	2
Federal Aviation Administration for animal damage control............	30,000	1	30,000	1	30,000	1
Forest Service for gypsy moth control traps and sterility technique evaluation, administrative support and animal damage control.	290,847	4	290,000	4	290,000	4
Environmental Protection Agency for Biotechnology..	15,000	--	15,000	--	15,000	--

	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Tennessee Valley Authority for animal damage control activities................	27,084	--	27,000	--	27,000	--
Smithsonian Institution for animal damage control study....................	1,000	--	1,000	--	1,000	--
U.S. Air Force for animal damage control activities.	12,920	--	13,000	--	13,000	--
U.S. Army for animal damage control activities	175,769	3	175,000	3	175,000	3
U.S. Marine Corps for animal damage control activities................	10,000	--	10,000	--	10,000	--
U.S. Navy for overtime quarantine inspection and animal damage control.....	196,121	2	196,000	2	196,000	2
Total, Other Federal Funds	1,025,486	15	1,023,500	15	1,023,500	15
Non-Federal Funds Funds derived from importers and exporters for import-export inspection, laboratory testing, control and eradication services......	18,105,864	--	19,069,000	--	19,112,000	--
Funds from State and local governments for animal damage control activities.	4,378,822	113	4,043,205	113	4,000,000	113
Feed, care, and attendants for animals in quarantine.	1,807,325	22	1,631,000	22	1,631,000	22
Miscellaneous Contributed Funds....................	3,841,760	40	3,369,000	31	3,369,000	31
Total, Non-Federal Funds.	28,133,771	175	28,112,205	166	28,112,000	166
Total, Animal and Plant Health Inspection Service.	368,983,359	5,633	396,232,205	5,680	428,604,000	5,750

	1989 Actual	1990 Estimated	1991 Estimated
Full-Time Equivalent Staff-Years:			
Ceiling............................	5,633	5,680	5,750
Non-Ceiling........................	343	342	342
	5,976	6,022	6,092

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Permanent Positions by Grade and Staff-Year Summary

1989 and Estimated 1990 and 1991

	FY 1989			FY 1990			FY 1991		
GRADE	Headquarters	Field	Total	Headquarters	Field	Total	Headquarters	Field	Total
ES-5	3	1	4	3	1	4	3	1	4
ES-4	6	1	7	6	1	7	6	1	7
ES-3	1	1	2	1	1	2	1	1	2
ES-2	0	4	4	0	4	4	0	4	4
ES-1	4	0	4	4	0	4	4	0	4
GS/GM-15	42	22	64	42	22	64	42	22	64
GS/GM-14	126	118	244	125	118	243	130	119	249
GS/GM-13	114	195	309	113	195	308	118	197	315
GS-12	103	512	615	102	512	614	106	517	623
GS-11	56	400	456	56	400	456	58	404	462
GS-10	1	22	23	1	22	23	1	22	23
GS-9	62	879	941	62	879	941	64	888	952
GS-8	10	16	26	10	16	26	10	16	26
GS-7	66	546	612	66	546	612	69	552	621
GS-6	60	106	166	60	106	166	62	107	169
GS-5	80	449	529	79	449	528	82	454	536
GS-4	42	395	437	42	395	437	44	399	443
GS-3	23	109	132	23	109	132	24	110	134
GS-2	7	21	28	7	21	28	7	21	28
Other Graded Positions....	0	20	20	0	20	20	0	20	20
Ungraded Positions........	0	250	250	0	250	250	0	253	253
Total Permanent Positions.	806	4,067	4,873	802	4,067	4,869	831	4,108	4,939
Staff-Years:									
Ceiling................	892	4,741	5,633	892	4,788	5,680	892	4,858	5,750
Non-Ceiling............	7	336	343	7	335	342	7	335	342
TOTAL................	899	5,077	5,976	899	5,123	6,022	899	5,193	6,092

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

		1989	1990	1991
Personnel Compensation:				
	Headquarters	$30,297,129	$31,176,000	$33,497,000
	Field	124,551,455	132,060,000	138,079,000
		154,848,584	163,236,000	171,576,000
11	Total personnel compensation	154,848,584	163,236,000	171,576,000
12	Personnel benefits	32,629,186	34,396,000	36,153,000
13	Benefits for former personnel	319,153	336,000	349,000
Total personnel compensation and benefits		187,796,923	197,968,000	208,078,000
Other Objects:				
21	Travel	10,686,020	11,268,000	11,691,000
22	Transportation of things	3,809,313	4,015,000	4,166,000
23.2	Rental payments to others	2,644,326	2,787,000	2,891,000
23.3	Communications, utilities and miscellaneous charges	14,960,379	15,770,000	16,361,000
24	Printing and reproduction	995,615	1,050,000	1,089,000
25	Other services	54,999,008	57,978,000	60,152,000
26	Supplies and materials	17,875,592	18,844,000	19,551,000
31	Equipment	9,893,986	10,430,000	10,821,000
32	Lands and structures	2,284,572	13,608,000	25,396,000
41	Grants, contributions, subsidies	27,846,223	27,580,000	26,980,000
42	Insurance claims and indemnities	2,667,667	6,360,000	6,160,000
43	Interest and dividends	8,071	10,000	10,000
	Total other objects	148,670,772	169,700,000	185,268,000
Total direct obligations		336,468,695	367,668,000	393,346,000

Position Data:

Average Salary, ES positions	$74,652	$91,075	$93,876
Average Salary, GM/GS positions	$32,490	$33,489	$34,519
Average Grade, GM/GS positions	8.59	8.59	8.59

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The estimates include appropriation language for this item as follows (new language is underscored; deleted matter is enclosed in brackets):

Salaries and Expenses:

For expenses, not otherwise provided for, including those pursuant to
the Act of February 28, 1947, as amended (21 U.S.C. 114b-c), necessary to
prevent, control, and eradicate pests and plant and animal diseases; to
carry out inspection, quarantine, and regulatory activities; to discharge
the authorities of the Secretary of Agriculture under the Act of March 2,
1931 (46 Stat. 1468; 7 U.S.C. 426-426b); and to protect the environment, as
authorized by law, [$352,182,000] $367,950,000, of which $4,500,000 shall
be available for the control of outbreaks of insects, plant diseases,
animal diseases and for control of pest animals and birds to the extent
necessary to meet emergency conditions: Provided, [That $1,000,000 of the
1 funds for control of the fire ant shall be placed in reserve for matching
purposes with States which may come into the program: Provided further,]
That no funds shall be used to formulate or administer a brucellosis
eradication program for the current fiscal year that does not require
minimum matching by the States of at least 40 per centum: Provided
further, That this appropriation shall be available for field employment
pursuant to the second sentence of section 706(a) of the Organic Act of
1944 (7 U.S.C. 2225), and not to exceed $40,000 shall be available for
employment under 5 U.S.C. 3109: Provided further, That funds available to
2 the Animal and Plant Health Inspection Service (APHIS) under this and
subsequent appropriations shall be available for contracting with
individuals for services to be performed outside of the United States, as
determined by APHIS to be necessary or appropriate for carrying out
programs and activities abroad. Such individuals shall not be regarded as
officers or employees of the United States under any law administered by
the Office of Personnel Management: Provided further, That this
appropriation shall be available for the operation and maintenance of
3 aircraft and the purchase of not to exceed [two] four, of which [one] two
shall be for replacement only: Provided further, That uniform allowances
for each uniformed employee of the Animal and Plant Health Inspection
Service shall not be in excess of $400 annually: Provided further, That,
in addition, in emergencies which threaten any segment of the agricultural
production industry of this country, the Secretary may transfer from other
appropriations or funds available to the agencies or corporations of the
Department such sums as he may deem necessary, to be available only in such
emergencies for the arrest and eradication of contagious or infectious
disease or pests of animals, poultry, or plants, and for expenses in
accordance with the Act of February 28, 1947, as amended, and Section 102
of the Act of September 21, 1944, as amended, and any unexpended balances
of funds transferred for such emergency purposes in the next preceding
fiscal year shall be merged with such transferred amounts.

The first change eliminates the language that places funds in reserve for the imported fire ant control matching program. APHIS would enter into cooperative agreements with States to conduct regulatory and survey activities.

The second change provides the Agency with permanent contracting authority. In the past, APHIS has been assisted by the Department of State (State) in hiring local employees in foreign countries using State's contracting authority. APHIS hired approximately 100 to 125 staff-years through State. APHIS would use its own contracting authority in some locations where APHIS only had one employee assigned. The temporary APHIS employee would handle the work of the office during the absence of the APHIS Foreign Service employee. State has declared that they will no longer hire employees for use by APHIS using State's contracting authority. APHIS cannot use another Agency's contracting authority, i.e., Foreign Agriculture Service (FAS) contracting authority. This proposed legislation is not recommended to preclude the current contracting authority legislation, which grants APHIS temporary contracting authority for field employment. The temporary contracting authority is still needed where special expertise is required for field studies and in case of emergency outbreaks.

The third change increases the number of aircraft the Agency can purchase. Since the Animal Damage Control (ADC) program transferred to APHIS from the Department of the Interior, we have approximately doubled the size of our fleet. Considering the size of the fleet and the amount of air time and engine hours, the need for increasing the number of aircraft that the Agency can purchase in one year is necessary.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

SALARIES AND EXPENSES -- CURRENT LAW

Appropriation Act, 1990	$352,182,000
Budget Estimate, Current Law, 1991	367,950,000
Increase in Appropriation	+15,768,000

Adjustments in 1990:		
Appropriations Act, 1990	$352,182,000	
Gramm-Rudman-Hollings Reduction (P.L. 99-177)	-4,816,000	
Adjusted base for 1990		347,366,000
Budget Estimate, Current Law, 1991		367,950,000
Increase over adjusted 1990		+20,584,000

SALARIES AND EXPENSES-PROPOSED LEGISLATION

Budget estimate, Current Law, 1991	$367,950,000
Change due to proposed legislation	-78,938,000
Net Request, President's 1991 Budget Request	289,012,000

SUMMARY OF INCREASES AND DECREASES-CURRENT LAW

(On basis of adjusted appropriation)

Item of Change	1990 Estimated	Pay Cost	Program Changes	1991 Estimated
Africanized Honeybee	$1,916,000	--	-$1,916,000	--
Agricultural Quarantine Inspection	64,615,000	+$2,951,000	+7,403,000	$74,969,000
Foot-and-Mouth Disease	3,011,000	+62,000	+851,000	3,924,000
Import-Export	8,486,000	+371,000	+144,000	9,001,000
International Programs	4,238,000	+158,000	+96,000	4,492,000
Mediterranean Fruit Fly	9,729,000	+212,000	+490,000	10,431,000
Mexican Fruit Fly	1,504,000	+71,000	+170,000	1,745,000
Screwworm	31,607,000	+328,000	+1,456,000	33,391,000
Animal Disease Detection	5,320,000	+253,000	+3,683,000	9,256,000
Pest Detection	3,717,000	+97,000	+326,000	4,140,000
Animal Damage Control Operations	22,081,000	+821,000	+1,386,000	24,288,000
Animal Health Compliance and Enforcement	14,493,000	+452,000	-2,591,000	12,354,000
Biocontrol	5,482,000	+237,000	+1,625,000	7,344,000
Boll Weevil	12,841,000	+143,000	-3,168,000	9,816,000
Brucellosis	61,927,000	+1,523,000	+1,103,000	64,553,000
Cattle Ticks	6,172,000	+158,000	-1,870,000	4,460,000
Citrus Canker	--	--	+1,264,000	1,264,000
Grasshopper and Mormon Cricket	8,517,000	+123,000	-2,562,000	6,078,000
Gypsy Moth	4,601,000	+176,000	+100,000	4,877,000
Honeybee Pest	351,000	+11,000	+140,000	502,000
Imported Fire Ant	4,232,000	+42,000	-2,722,000	1,552,000
Miscellaneous Animal and Plant Diseases	2,342,000	+94,000	+846,000	3,282,000
Noxious Weeds	842,000	+11,000	-264,000	589,000
Pink Bollworm	1,302,000	+47,000	-339,000	1,010,000
Pseudorabies	3,292,000	+35,000	-252,000	3,075,000
Russian Wheat Aphid	898,000	--	-898,000	--
Scrapie	1,085,000	--	-1,085,000	--
Animal Welfare	7,464,000	+355,000	+869,000	8,688,000

Item of Change	1990 Estimated	Pay Cost	Program Changes	1991 Estimated
Horse Protection	159,000	+15,000	+185,000	359,000
Animal Damage Control Methods Development	7,326,000	+258,000	+179,000	7,763,000
Biotechnology	4,685,000	+191,000	+1,642,000	6,518,000
Plant Methods Development	4,823,000	+115,000	+561,000	5,499,000
Veterinary Biologics	8,523,000	+299,000	+685,000	9,507,000
Veterinary Diagnostics	12,201,000	+341,000	+2,256,000	14,798,000
All Other	17,584,000	+441,000	+400,000	18,425,000
Total	347,366,000	+10,391,000	+10,193,000	367,950,000

PROJECT STATEMENT - Current Law
(On basis of adjusted appropriation)

PROJECT	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
1. Pest and disease exclusion:							
(a) Africanized honey bee	$1,773,238	10	$1,916,000	10	-$1,916,000	--	--
(b) Agricultural quarantine inspection	65,141,800	1,783	64,615,000	1,752	+10,354,000	$74,969,000	1,850
(c) Foot-and-mouth disease	3,000,514	7	3,011,000	7	+913,000	3,924,000	13
(d) Import-Export inspection	8,558,001	192	8,486,000	192	+515,000	9,001,000	205
(e) International programs	4,179,707	41	4,238,000	41	+254,000	4,492,000	41
(f) Mediterranean fruit fly	9,538,558	79	9,729,000	79	+702,000	10,431,000	110
(g) Mexican fruit fly	1,443,436	24	1,504,000	24	+241,000	1,745,000	31
(h) Screwworm	31,980,458	72	31,607,000	100	+1,784,000	33,391,000	138
Total, Pest and disease exclusion	125,615,712	2,208	125,106,000	2,205	(1) +12,847,000	137,953,000	2,388
2. Plant and animal health monitoring:							
(a) Animal disease detection	4,657,649	75	5,320,000	69	+3,936,000	9,256,000	72
(b) Pest detection	3,996,831	69	3,717,000	65	+423,000	4,140,000	71
Total, plant and animal health monitoring	8,654,480	144	9,037,000	134	(2) +4,359,000	13,396,000	143
3. Pest and disease management:							
(a) ADC Operations	19,299,019	427	22,081,000	464	+2,207,000	24,288,000	474
(b) Animal health compliance and enforcement	15,457,981	394	14,493,000	394	-2,139,000	12,354,000	335
(c) Biocontrol	4,083,725	99	5,482,000	122	+1,862,000	7,344,000	131
(d) Boll weevil	9,485,900	117	12,841,000	126	-3,025,000	9,816,000	100
(e) Brucellosis	55,813,882	575	61,927,000	575	+2,626,000	64,553,000	575
(f) Cattle ticks	5,828,428	167	6,172,000	167	-1,712,000	4,460,000	101
(g) Citrus canker	--	--	--	--	+1,264,000	1,264,000	16
(h) Golden nematode	869,663	18	761,000	15	+47,000	808,000	20
(i) Grasshopper and Mormon cricket	6,531,145	26	8,517,000	26	-2,439,000	6,078,000	26
(j) Gypsy moth	4,617,449	109	4,601,000	109	+276,000	4,877,000	109
(k) Honey bee pests	--	--	351,000	4	+151,000	502,000	4
(l) Imported fire ant	2,916,644	39	4,232,000	39	-2,680,000	1,552,000	12
(m) Miscellaneous plant and animal diseases	2,872,715	37	2,342,000	15	+940,000	3,282,000	26
(n) National poultry improvement plan	217,351	2	216,000	4	+13,000	229,000	4
(o) Noxious weeds	524,678	5	842,000	9	-253,000	589,000	6
(p) Pink bollworm	1,383,462	36	1,302,000	36	-292,000	1,010,000	23
(q) Poultry diseases	637,434	7	634,000	7	+39,000	673,000	7
(r) Pseudorabies	3,100,311	21	3,292,000	21	-217,000	3,075,000	21
(s) Russian wheat aphid	--	--	898,000	6	-898,000	--	--
(t) Scrapie	--	--	1,085,000	5	-1,085,000	--	--
(u) Swine health protection	3,352,957	84	3,220,000	84	+197,000	3,417,000	84
(v) Tuberculosis	3,963,192	37	3,453,000	37	+201,000	3,654,000	37
(w) Witchweed	4,912,414	76	4,857,000	75	+287,000	5,144,000	80
Total, Pest and disease management	145,868,350	2,276	163,599,000	2,340	(3) -4,630,000	158,969,000	2,191
4. Animal Care:							
(a) Animal welfare	5,795,366	150	7,464,000	155	+1,224,000	8,688,000	166
(b) Horse protection	132,637	4	159,000	4	+200,000	359,000	8
Total, Animal Care	5,928,003	154	7,623,000	159	(4) +1,424,000	9,047,000	174
5. Scientific and technical services:							
(a) ADC methods development	7,742,213	121	7,326,000	127	+437,000	7,763,000	127
(b) Biotechnology	3,728,124	47	4,685,000	50	+1,833,000	6,518,000	60
(c) Plant methods development laboratories	4,785,000	72	4,823,000	72	+676,000	5,499,000	75
(d) Veterinary biologics	9,015,781	190	8,523,000	190	+984,000	9,507,000	190
(e) Veterinary diagnostics	12,475,876	185	12,201,000	176	+2,597,000	14,798,000	175
Total, Scientific and technical services	37,746,994	615	37,558,000	615	(5) +6,527,000	44,085,000	627
6. Contingencies:							
Plant and animal diseases and pests	4,169,276	--	4,443,000	--	(6) +57,000	4,500,000	--

PROJECT	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
Unobligated balance lapsing	908,806	--	--	--	--	--	--
Unobligated balance available, start-of-year	-4,378,822	--	--	--	--	--	--
Unobligated balance available, end-of-year	6,694,201	--	--	--	--	--	--
Total, Available or estimate Appropriated funds	331,207,000	5,397	347,366,000	5,453	+20,584,000	367,950,000	5,523
7. Advances and reimbursements:							
(a) Pest and disease exclusion	18,186,576	21	18,603,576	21	--	18,603,576	21
(b) Pest and disease management	5,276,605	121	5,397,605	121	--	5,397,605	121
(c) Scientific & technical services	6,116,953	32	6,256,953	32	--	6,256,953	32
Total, Advances and reimbursements	29,580,134	174	30,258,134	174	--	30,258,134	174
Total, Available or estimate	360,787,134	5,571	377,624,134	5,627	+20,584,000	398,208,134	5,697
Receipts from Advances and reimbursements	-29,580,134	-174	-30,258,134	-174	--	-30,258,134	-174
Total, Available or estimate	331,207,000	5,397	347,366,000	5,453	+20,584,000	367,950,000	5,523
Gramm-Rudman-Hollings reduction	--	--	4,816,000	--			
Total, Appropriation	331,207,000	5,397	352,182,000	5,453			

PROJECT STATEMENT - Current Law
(On basis of available funds)

PROJECT	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
1. Pest and disease exclusion:							
(a) Africanized honey bee	$1,773,238	10	$1,916,000	10	-$1,916,000	--	--
(b) Agricultural quarantine inspection	65,141,800	1,783	64,615,000	1,752	+10,354,000	$74,969,000	1,850
(c) Foot-and-mouth disease	3,000,514	7	3,011,000	7	+913,000	3,924,000	13
(d) Import-Export inspection	8,558,001	192	8,486,000	192	+515,000	9,001,000	205
(e) International programs	4,175,707	41	4,238,000	41	+254,000	4,492,000	41
(f) Mediterranean fruit fly	9,536,558	79	9,729,000	79	+702,000	10,431,000	110
(g) Mexican fruit fly	1,443,436	24	1,504,000	24	+241,000	1,745,000	31
(h) Screwworm	31,986,458	72	31,607,000	100	+1,784,000	33,391,000	138
Total, Pest and disease exclusion	125,615,712	2,208	125,106,000	2,205	(1) +12,847,000	137,953,000	2,388
2. Plant and animal health monitoring:							
(a) Animal disease detection	4,657,649	75	5,320,000	69	+3,936,000	9,256,000	72
(b) Pest detection	3,996,831	69	3,717,000	65	+423,000	4,140,000	71
Total, plant and animal health monitoring	8,654,480	144	9,037,000	134	(2) +4,359,000	13,396,000	143
3. Pest and disease management:							
(a) ADC Operations a/	19,299,019	427	22,770,106	464	+1,517,894	24,288,000	474
(b) Animal health compliance and enforcement	15,457,981	394	14,493,000	394	-2,139,000	12,354,000	335
(c) Biocontrol	4,083,725	99	5,482,000	122	+1,862,000	7,344,000	131
(d) Boll weevil	15,685,900	117	12,841,000	126	-3,025,000	9,816,000	100
(e) Brucellosis	55,813,862	575	61,927,000	575	+2,626,000	64,553,000	575
(f) Cattle ticks	5,828,428	167	6,172,000	167	-1,712,000	4,460,000	101
(g) Citrus canker	--	--	--	--	+1,264,000	1,264,000	16
(h) Golden nematode	866,663	18	761,000	15	+47,000	808,000	20
(i) Grasshopper and Mormon cricket b/	3,106,819	26	3,585,000	26	+2,493,000	6,078,000	26
(j) Grasshopper--no year	3,424,326	--	10,371,140	--	-10,371,140	--	
(k) Gypsy moth	4,617,449	109	4,601,000	109	+276,000	4,877,000	109
(l) Honey bee pests	--	--	351,000	4	+151,000	502,000	4
(m) Imported fire ant	2,916,644	39	4,232,000	39	-2,680,000	1,552,000	12
(n) Miscellaneous plant and animal diseases	2,872,715	37	2,342,000	15	+940,000	3,282,000	26
(o) National poultry improvement plan	217,351	2	216,000	4	+13,000	229,000	4
(p) Noxious weeds	524,678	5	842,000	9	-253,000	589,000	6
(q) Pink bollworm	1,383,462	36	1,302,000	36	-292,000	1,010,000	23
(r) Poultry diseases	637,434	7	634,000	7	+39,000	673,000	7
(s) Pseudorabies	3,100,311	21	3,292,000	21	-217,000	3,075,000	21
(t) Russian wheat aphid	--	--	898,000	6	-898,000	--	--
(u) Scrapie	--	--	1,085,000	5	-1,085,000	--	--
(v) Swine health protection	3,352,957	84	3,220,000	84	+197,000	3,417,000	84
(w) Tuberculosis	3,963,192	37	3,453,000	37	+201,000	3,654,000	37
(x) Witchweed	4,912,414	76	4,857,000	75	+287,000	5,144,000	80
Total, Pest and disease management	152,060,350	2,276	169,727,246	2,340	(3) -10,758,246	158,969,000	2,191
4. Animal Care:							
(a) Animal welfare	5,795,366	150	7,464,000	155	+1,224,000	8,688,000	166
(b) Horse protection	132,637	4	159,000	4	+200,000	359,000	8
Total, Animal Care	5,928,003	154	7,623,000	159	(4) +1,424,000	9,047,000	174
5. Scientific and technical services:							
(a) ADC methods development	7,742,213	121	7,326,000	127	+437,000	7,763,000	127
(b) Biotechnology	4,078,124	47	4,685,000	60	+1,833,000	6,518,000	60
(c) Plant methods development laboratories	4,785,000	72	4,823,000	72	+676,000	5,499,000	75
(d) Veterinary biologics	8,665,781	190	8,523,000	180	+984,000	9,507,000	180
(e) Veterinary diagnostics	12,475,876	185	12,201,000	176	+2,597,000	14,798,000	175
Total, Scientific and technical services	37,746,994	615	37,558,000	615	(5) +6,527,000	44,085,000	617
6. Contingencies:							
Plant and animal diseases and pests c/	4,189,276	--	5,000,955	--	(6) -500,955	4,500,000	--

PROJECT	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
Unobligated balance available, start-of-year	-4,378,822	--	-6,694,201	--	+6,694,201	--	--
Unobligated balance available, end-of-year	6,694,201	--	--	--	--	--	--
Unobligated balance lapsing	908,806	--	--	--	--	--	--
Transfer from Commodity Credit Corporation	-6,200,000	--	--	--	--	--	--
Total, Available or estimate, appropriated funds	331,207,000	5,397	347,366,000	5,453	+20,564,000	367,950,000	5,523
7. Advances and reimbursements							
(a) Pest and disease exclusion	18,186,576	21	18,603,576	21	--	18,603,576	21
(b) Pest and disease management	5,276,605	121	5,397,605	121	--	5,397,605	121
(c) Scientific & technical services	6,116,953	32	6,256,953	32	--	6,256,953	32
Total, Advances and reimbursements	29,580,134	174	30,258,134	174	--	30,258,134	174
Total, Available or estimate	360,787,134	5,571	377,624,134	5,627	+20,584,000	398,208,134	5,697
Receipts from Advances and reimbursements	-29,580,134	-174	-30,258,134	-174	--	-30,258,134	-174
Total Available or estimate	331,207,724	5,397	347,366,000	5,453	+20,584,000	367,950,000	5,523

a/ FY 1990 animal damage control carryover available from the prior year is $689,106.

b/ FY 1989 unobligated grasshopper carryover available from the prior year is $3,863,466 and $5,000,000 from the no-year fund.

FY 1990 grasshopper carryover available from the prior year is $5,439,140 and $4,932,000 from the no-year fund.

c/ FY 1989 unobligated contingency fund carryover available from the prior year is $235,231.

FY 1990 contingency fund carryover from the prior year is $565,955.

EXPLANATION OF PROGRAM

The Animal and Plant Health Inspection Service (APHIS) was established on April 2, 1972, pursuant to the authority of the Reorganization Plan No. 2 of 1953.

APHIS conducts cooperative programs with State and local agencies and organizations to control, eradicate, and prevent the movement of plant and animal diseases and pests. Inspection and regulatory programs prevent the introduction into the United States of pests and diseases of foreign origin and the spread of those pests within the country. Under the Federal Noxious Weed Act of 1974, the Agency carries out survey, regulatory, and control actions to protect American agriculture from the invasion and interstate spread of noxious weeds. APHIS, under the Endangered Species Act, regulates the import and export of designated endangered plant species and ensures that cooperative Federal-State pest control programs which utilize pesticides will not adversely affect endangered species. Under the Virus-Serum-Toxin Act, APHIS carries out activities to prevent the production and distribution of worthless, contaminated, dangerous, or harmful veterinary biologics. Under the authority of the Animal Welfare Act, the Agency conducts activities to ensure that certain animals intended for use in research or for exhibition purposes are provided with humane care and treatment, to assure humane treatment of animals during transportation in commerce, and to prevent the sale or use of animals which have been stolen. APHIS, under the authority of the Horse Protection Act, works to prevent the interstate movement or exhibition of horses which have been "sored." Under the Swine Health Protection Act, the Agency conducts a Federal-State program to control the feeding of raw garbage to swine. APHIS, under the authority of the Animal Damage Control Act of 1931, researches and carries out cooperative programs to control wildlife-caused losses to agriculture, safety hazards at airports, and public nuisances in a variety of areas. APHIS, under authority of the Plant Pest Act, Plant Quarantine Act, and Virus-Serum-Toxin Act coordinates the development and implementation of the Department's regulation and evaluation of applications of a number of biotechnologically derived products for test permits and commercial licenses.

The appropriation "Salaries and Expenses" for APHIS funds the following activities:

1. Pest and disease exclusion programs -- APHIS carries out inspections at U.S. ports-of-entry to prevent the introduction of foreign plant and animal pests and diseases which are harmful to our country's agriculture. APHIS develops and conducts preclearance programs to ensure that foreign agricultural products destined for the United States do not present a risk to U.S. agriculture. APHIS engages in cooperative programs to control pests of imminent concern to the United States and to strengthen foreign plant protection and quarantine organizations. APHIS also certifies plants and plant products for export and regulates imports and exports of designated endangered plant species. APHIS assists U.S. exporters and the Foreign Agricultural Service in revising foreign plant and animal import regulations to encourage and increase U.S. agricultural exports.

The statutory authority supporting this program is contained in 7 U.S.C. 148 and 150aa-150jj; 19 U.S.C. 1306; and 21 U.S.C. 102, 111-120, 121-123, 127, and 135-135b. The principal legislative authorities for these activities include the Organic Act of 1944, as amended by P.L. 94-231, enacted March 15, 1976; the Plant Quarantine Act of 1912; and the Mexican Border Act of 1942. The Department's enforcement responsibilities for endangered plants are contained in the Endangered Species Act of 1973. The Airport and Airways Development Act, P.L. 94-353, Section 15(c), was enacted July 12, 1976. The activities carried out in the pest and disease exclusion programs are as follows:

-- Africanized Honey Bee - Since its accidental release in Brazil in 1956, the Africanized honey bee (AHB) has been advancing toward the U.S. border. A relative to the European honey bee, the AHB is characterized by a defensive stinging behavior, a tendency to abscond or swarm frequently, and is more difficult and expensive to manage than its European counterpart. Upon its establishment in this country, the AHB could cost American agriculture approximately $1.2 billion per year in decreased crop pollination and honey production. The goal of this program is to retard the northward migration of the AHB and to attempt to dampen its aggressive traits through genetic dilution.

-- Agricultural Quarantine Inspection - The purpose of the agricultural quarantine inspection (AQI) program is to protect the country from exotic pests and diseases by inspecting the increasing amount of cargo and international air and sea passengers at ports-of-entry, and cargo and people crossing the Mexican and Canadian borders. Each person or bag entering into this country could carry an exotic pest capable of causing a major outbreak. APHIS continues to implement innovative techniques such as X-ray machines and detector dogs to deal with the increasing workload. The increasing use of X-ray technology for passenger baggage has increased the efficiency in passenger inspections. Another important innovation, the continued use of detector dogs, increases the success rate of finding concealed regulated items in international airports to 80 percent.

-- Foot-and-Mouth Disease (FMD) - Darien Gap - The purpose of the Darien Gap FMD program is to prevent the disease in South America from entering Panama, Central America, Mexico, and the United States. The program is conducted in Colombia and Panama. Program methods include surveillance, inspection, quarantine, vaccination, and emergency preparedness. Estimates show that 15-year losses of more than $12 billion could occur if FMD were to re-enter the United States.

-- Import/Export

Import Animals - The purpose of the import animals program is to assure that all imported animals and animal germplasm are free of infectious diseases. Principal methods include: inspection, testing, and certification of imported animals, animal germplasm, zoos, means of conveyance, slaughter establishments, and ports-of-entry; quarantine of imported animals and animal germplasm; maintenance of animal import centers in Newburgh, New York; Miami, Florida; Honolulu, Hawaii; and Key West, Florida; authorization or operation of quarantine facilities for birds, horses, and sheep; and the interception of smuggled animals.

Export Animals - The export animals program implements activities designed to insure that all inspections of livestock, live poultry, and hatching eggs exported from the United States and certifications of freedom from contagious diseases are in compliance with U.S. Department of Agriculture (USDA) health agreements with importing countries. This function is vital to the protection and expansion of this country's animal export market, which currently is valued at over $400 million annually.

-- International Programs - International programs' objective is to protect and promote U.S. agriculture by maintaining an APHIS presence in foreign countries which are significant agricultural trading partners and may also be potential sources of economically-dangerous agricultural pests and diseases. The presence of APHIS personnel at overseas locations, either on permanent assignment or short-term detail, provides an effective first line of defense against the entry of foreign plant and animal diseases and pests into the United States. It also facilitates the export of U.S. agricultural products, and promotes the exchange of scientific and technical information on animal and plant health programs.

-- Mediterranean Fruit Fly - The objective of the Mediterranean fruit fly (Medfly) program is to prevent sustained infestations of this dangerous pest of fruits and vegetables from occurring in the continental United States, Virgin Islands, Puerto Rico, and north of the 16° N.latitude in Central America. The Medfly is one of the world's most destructive pests of fruits and vegetables and is found throughout Central America. The pest is capable of becoming established in fruit and vegetable growing regions in both Mexico and the continental United States. Approximately

80 percent of U.S. citrus production is susceptible to Medfly. The estimated potential annual loss to the California and Florida citrus industries attributable to an established Medfly infestation is almost $2 billion. The presence of Medfly in Mexico would pose a serious threat to the United States because of Mexico's neighboring location and because it is a major source of winter fruits and vegetables for the United States.

-- Mexican Fruit Fly - The Mexican fruit fly (Mexfly) is a serious pest of citrus and mangoes, and is native to most of Mexico and Central America. Infestations of this pest occur annually in the lower Rio Grande Valley of Texas. Other citrus growing States such as Arizona, California, and Florida are vulnerable to Mexfly infestations either by migration of these flies across the northwestern border with Mexico, or from infested fruit being shipped to or through these States.

Total citrus production in the United States was valued at approximately $2 billion for the 1986-1987 season. A sustained Mexfly infestation would result in severe losses to the Texas industry which is valued at approximately $100 million annually. Approximately one-third of Texas citrus production is shipped to California for consumption or export abroad, thus placing California at risk as well.

-- Screwworm - The goal of this program is to prevent the reintroduction of the parasitic screwworm (*Cochliomyia hominivorax*) into the United States by eradicating this insect in Mexico and Central America. In 1984, the insect was successfully eradicated to the Isthmus of Tehuantepec and it was felt that in the best interest of the United States, the barrier zone should be established in Panama rather than Mexico. In FY 1987, the Joint U.S.-Mexico Commission entered into negotiations with both Guatemala and Belize for the eradication of Screwworm in their countries. In order to reduce movement of infested cattle into the barrier zone, the active eradication zone was extended west and north to include the Yucatan Peninsula of Mexico.

The levels of pest and disease exclusion activities are shown by the selected examples that follow:

	1989 Actual	1990 Estimated	1991 Estimated
Africanized Honey Bee:			
Traps set	50,000	50,000	--
Swarms collected	25,000	25,000	--
Agricultural Inspection Service:			
Plant and animal product and byproduct inspection:			
Airplanes (thousands)	339	363	381
Vessels (thousands)	54	57	59
Plant units processed (millions)	318	325	331
Regulated and Miscellaneous cargo inspections conducted (thousands)	1,067	1,141	1,190
Phytosanitary export certification:			
Certificates issued (thousands)	182	184	188
Interceptions (thousands):			
Unauthorized plant material	1,394	1,430	1,472
Unauthorized animal products/ byproducts	181	184	188
Unauthorized material:			
Mail	10.7	12	13.1
Baggage	1,120	1,123	1,134

	1989 Actual	1990 Estimated	1991 Estimated
Foct-and-Mouth Disease (Darien Gap):			
Number of vesicular disease investigations in Panama and Columbia	87	80	75
Import-Export:			
Import inspection:			
Animal (thousands)	2,290	2,500	2,700
Personally owned pet birds	2,811	3,000	3,000
Commercial birds	3[illegible],000	400,000	400,000
Poultry (baby chick & poults) (thousands)	6,976	7,000	7,000
Poultry hatching eggs (thousands)	22,322	23,000	24,000
Export inspection:			
Cattle, swine, sheep, goats, and horses	831,022	900,000	900,000
Poultry (thousands)	43,610	45,000	46,000
Dozens of hatching eggs (thousands)	24,541	25,000	25,500
Bull Semen (thousands)	48,333	55,000	58,000
Bovine Embryos (thousands)	10,626	13,000	19,000
International programs:			
Number of exotic disease investigations in Mexico and Central American countries	259	250	250
Mediterranean fruit fly:			
Sterile insects released (California) (millions)	1,427	14,710	500
Sterile insects released (Hawaii) (millions)	--	--	700,000
Sterile insects released (Mexico and Central America) (millions)	27,200	24,000	30,000
Sterile insects produced (Guatemala) (millions)	10,100	5,300	16,800
Mexican fruit fly:			
Sterile insects released (millions)	874	1,040	1,040
Sterile insects released (Texas) (millions)	1,050	1,040	1,040
Screwworm:			
Cases in the United States	1	--	--
Cases in Mexican States bordering the United States	--	--	--
Sterile fly production--Tuxtla, Gutierrez, Mexico (millions - weekly)	250	100	100

2. Plant and animal health monitoring programs -- The plant and animal health monitoring programs are primarily cooperative efforts of the Federal and State governments, and industry. APHIS conducts programs to prevent communicable plant and animal diseases of foreign origin from entering the United States. Upon entrance into this country, the pests and diseases are rapidly diagnosed. The Agency also carries out surveys in cooperation with the States to detect harmful plant and animal pests and diseases. The programs also help determine if there is a need to set up pest or disease eradication programs.

The statutory authority for this work is contained in 7 U.S.C. 15, 17, 30, 54, 429, and 3801; 15 U.S.C. 44; 19 U.S.C. 4; 21 U.S.C. 4, 5, and 45; 46 U.S.C. 15; and 49 U.S.C. 20. Principle legislative authority for these activities is contained in the Act of May 29, 1884; Act of August 30, 1890; Act of February 2, 1903; Act of March 3, 1905; Act of June 17, 1930; Act of September 21, 1944; Act of February 28, 1947; Act of September 6, 1961; Act of July 2, 1962; and Public Law 97-46 of September 25, 1981; Act of October 14, 1982; Act of January 13, 1983; P.L. 99-198 of December 23, 1985.

-- Animal Disease Detection - The purpose of the animal disease detection program is to protect and monitor the health of the Nation's livestock and maintain the capability to rapidly eliminate outbreaks of foreign animal diseases should they occur. This is accomplished through diagnostic efforts, surveillance of domestic and foreign animal diseases, and by area surveys of domestic livestock conditions. The program is a cooperative effort of the Federal and State governments, and industry.

An important component of the program is the National Animal Health Monitoring System (NAHMS). This Federal-State-industry program collects descriptive data about the occurrence and costs of animal health events from a statistically determined sample of selected food animal producers. The data is analyzed to detect disease trends and associations between environmental and managerial factors and the occurrence and costs of domestic diseases. The information derived from NAHMS may be used by producers to improve health and production efficiency of livestock and poultry through a variety of approaches, including improved management practices, preventive measures, and treatments.

-- Pest Detection - The pest detection program has two main functions. The first function is to rapidly discover foreign plant pests, which reduces pest control costs and prevents widespread agricultural damage. The program's second function is to monitor the status of the Nation's endemic plant pests and provide information to support the certification of U.S. agricultural exports and management decisions.

APHIS works in cooperation with the 50 States in a project called the Cooperative Agricultural Pest Survey (CAPS). As part of this program, the States enter the results of plant pest surveys into a national database, the National Agricultural Pest Information System (NAPIS). Updated information entered by the States may be quickly retrieved by State Departments of Agriculture, universities, private industry, and extension offices. NAPIS data can support statements to foreign officials about the pest-free status of particular U.S. agricultural exports and also help determine the need for pest eradication action programs.

The levels of plant and animal health monitoring activities are shown by the selected examples that follow:

	1989 Actual	1990 Estimated	1991 Estimated
Animal disease detection:			
National Animal Health Monitoring System (NAHMS):			
Number of States participating...	13	19	25
Percent of U.S. livestock population covered:			
Dairy..........................	46	64	80
Beef-cow/calf..................	22	28	50
Swine..........................	51	70	75
Sheep..........................	26	35	60
Reports generated................	7,500	9,000	11,000
Total herds/flocks participating.	564	1,490	3,475
Exotic diseases and parasites:			
Investigation of suspicious cases	220	250	300
Confirmed primary outbreaks:			
Exotic Newcastle disease (VVND)	2	10	5

	1989 Actual	1990 Estimated	1991 Estimated
Plant pest detection:			
Number of pest records processed	362,000	312,000	262,000
Survey methods documented	503	400	350
Special area-wide pest reporting projects	15	12	12
Pest maps developed	7	7	7

3. Pest and disease management programs -- In cooperation with the States, APHIS conducts programs to detect, prevent, and eradicate pests and diseases which are harmful to agriculture. Interstate shipments of plants, livestock, and related materials are monitored and regulated to prevent the spread of disease and the distribution of impure, unsafe, and nonefficacious materials and products. Following the transfer of the Animal Damage Control (ADC) program from the U.S. Department of the Interior (USDI) in 1986, APHIS protects agriculture from detrimental animal predators through identification, demonstration, and application of the most appropriate methods of control.

The statutory authority for this work is contained in 7 U.S.C. 7-7b, 8, 11, 15, 17, 30, 54, 55, 429, and 3801; 15 U.S.C. 44; 19 U.S.C. 4; 21 U.S.C. 4, 5, and 45; 46 U.S.C. 15; and 49 U.S.C. 20. Principal legislative authority for these activities is contained in the Act of May 29, 1884; Act of August 30, 1890; Act of February 2, 1903; Act of March 3, 1905; Tariff Act of June 17, 1930; the Animal Damage Control Act of 1931; Act of September 21, 1944; Organic Act of 1944, as amended by P.L. 94-231, enacted March 15, 1976; Act of February 28, 1947; Act of September 6, 1961; Act of July 2, 1962; P.L. 92-629 of January 3, 1975; the Swine Health Protection Act of October 17, 1980; Public Law 97-46 of September 25, 1981; Act of October 14, 1982; Act of January 13, 1983; and P.L. 99-198 of December 23, 1985. The activities carried out are as follows:

-- Animal damage control - The ADC program was established in 1885 as the Bureau of Biological Survey under USDA. In 1939, the program was transferred to USDI, Fish and Wildlife Service. Pursuant to P.L. 99-190; H.J. Res. 465, 99 Cong. 1st Sess. 1985, ADC was again transferred, this time to be administered by APHIS. The ADC mission is to provide leadership in the science and practice of wildlife damage control in order to safeguard America's agricultural, industrial, and natural resources, and to protect public health and safety. Under the authority of the ADC Act of 1931, ADC conducts research and carries out cooperative programs to control wildlife-caused losses to agriculture, safety hazards at airports, and public nuisances in a variety of areas.

-- Animal health compliance and enforcement - The goal of this program is to monitor the health of the Nation's livestock and prevent the spread of communicable livestock diseases in interstate trade. Through the use of identification devices such as ear and backtags, infected and exposed animals are traced back to their farm of origin. Once the origin of the animals is determined, investigations are initiated where violations of interstate regulations are suspected. Regulatory enforcement is attained by monitoring the movement of livestock, maintaining a close liaison with practicing veterinarians, livestock dealers and other segments of the industry, and by prosecuting alleged violators.

-- Biocontrol - The objective of the program is to provide leadership and focus for the implementation of selected biological control agents against major plant pests. Program activities include the development, testing, and transfer to the private sector of new biological control techniques. APHIS works with the States, universities, and other Federal agencies in conducting biological control projects for agricultural pests of economic importance, including both insects and weeds.

- Boll weevil - The boll weevil program consists of three regional control or eradication projects. The boll weevil projects are cooperative efforts in which cooperators pay 70 percent and APHIS pays 30 percent of the program costs.
    - High Plains Control - The goal of this program, established in 1963, is to prevent the boll weevil from spreading into the non-infested areas of west Texas from the rolling plains area to the south and west.
    - Southeast Eradication - The program has eradicated the boll weevil from Virginia, North Carolina, and 95 percent of South Carolina. Growers in the eradicated area report substantial economic benefits as a result of this program. Because of these successes, the program was expanded in 1987 to include Georgia, Alabama, and northern Florida. The eradication effort in the expanded areas will take about 4 years to complete.
    - Southwest Eradication - The program is nearing completion in its original area and is proceeding rapidly in the expanded areas. The original eradication area which includes parts of southern California, western Arizona, and northern Mexico near the California border, was declared eradicated for boll weevil in 1987. The program was expanded in FY 1988 to include central Arizona and northern Mexico near the Arizona border.

- Brucellosis - The objective of the State-Federal Cooperative Brucellosis Program is to eradicate Brucella abortus from the bovine and swine populations of the United States. Major program tools include surveillance, elimination of infected herds through depopulation, calfhood vaccination, and recordkeeping. Increased emphasis is being placed on depopulation as the most effective means of rapidly reducing the incidence of the disease.

- Cattle ticks - The cattle tick program is a cooperative Federal-State effort designed to protect the livestock industry from losses due to bovine piroplasmosis, also known as cattle tick fever. A barrier zone in Texas prevents re-establishment of the cattle fever tick (Boophilus annulatus) and tropical cattle tick (Boophilus microplus) in the United States, while an eradication program for these ticks and the tropical bont tick (Amblyomma variegatum) is underway in Puerto Rico.

- Citrus canker - Citrus canker is a bacterial plant disease which attacks the leaves, twigs, and fruit of many varieties of citrus. In areas of the world where the disease has become established, it has caused severe losses (early fruit drop, fruit decay, unmarketable fruit) as a result of damage to fruit. In 1986, infestations of the more serious Asiatic ("A")-strain of citrus canker were detected in Manatee County, Florida. This led to significant concern regarding potential damage from the disease. The APHIS Citrus Canker Committee met in 1989. According to their study, benefit-cost ratios indicated that it is economically beneficial for APHIS to supplement Florida's eradication program of the A-strain.

- Golden Nematode - In order to eliminate golden nematode from the State of New York and to prevent the spread of the nematode to other potato producing States, APHIS cooperates with the New York State Department of Agriculture, the Agricultural Research Service, the Extension Service, Cornell University, and the New York Seed Improvement Cooperative. The program enforces regulations and sanitary requirements, develops new resistant potato varieties, and encourages grower acceptance of existing resistant varieties.

- Grasshopper and Mormon cricket - The goal of the APHIS grasshopper program is to prevent this pest from causing significant damage to U.S. rangeland and cropland. This is accomplished by treating Federal, State, and privately owned rangeland with chemical or biological control agents. Cropland may also be treated in circumstances where parcels of cropland are inseparable from adjoining rangeland. Since 1934, USDA has worked with the States and local ranchers to provide survey support and technical assistance to limit population buildups and prevent migration from rangeland to cropland. In past years, supplemental funds and a special no-year fund have been used to finance outbreak control activities.

APHIS began the grasshopper Integrated Pest Management project in FY 1987. The project is designed to find long-term, environmentally acceptable solutions to the problem of grasshopper infestations. The goal is to develop working models that address several questions: where grasshopper outbreaks will take place, the economic significance of such outbreaks, the most appropriate control strategies to be employed, and the economic and environmental consequences of recommended control actions.

-- Gypsy moth - The purpose of the gypsy moth program is to prevent the artificial spread of the pest from generally infested areas in New England, Mid-Atlantic States and parts of Michigan and West Virginia, and to prevent isolated infestations of 640 acres or less on non-Federal lands. This is accomplished by regulating the movement of outdoor household articles from generally infested areas, providing technical support in the eradication of isolated infestations, and cooperating with the States in detection surveys.

-- Honeybee pest - The approach of Africanized honeybees, the Varroa mite outbreak in FY 1988, and the honeybee tracheal mite outbreak in FY 1984 caused serious concern about protection for the honeybee industry. Up until FY 1988, States regulated the honeybee industry; however, after meeting with the honeybee industry in FY 1988 the States requested assistance in establishing more uniform regulatory efforts against exotic pests.

-- Imported fire ant - Since its introduction into the United States in 1918, the imported fire ant (IFA) has spread to 11 Southern States and Puerto Rico. In the late 1950's, the Department began working with the infested States to control IFA. At that time, the Department imposed a Federal quarantine and developed a cooperative control program designed to limit the ant's spread. The progress of the control program was hampered, however, when the Environmental Protection Agency (EPA) cancelled the registration of the insecticide Mirex in 1977. Since that time, EPA has not registered another product approved for widespread use on agricultural land. APHIS conducts large scale field trials and works with industry and other government agencies to evaluate promising control agents. APHIS is currently working to update the Environmental Impact Statement for IFA to include new products so that participation in cooperative control programs on eligible land would be possible if requested.

-- Miscellaneous plant and animal diseases - APHIS responds to numerous reports of new plant pest species in the United States each year. The miscellaneous plant pest program provides the mechanisms for response to those pests, including delimiting surveys, control or eradication treatments, and restricting the movement of commodities which could spread the pest. The miscellaneous animal diseases program encompasses several diseases and parasites of livestock that are not covered by an individual budget line item. Primary attention in recent years has been devoted to scrapie, bluetongue, and several equine diseases.

-- National Poultry Improvement Plan - The National Poultry Improvement Plan (NPIP) is a voluntary State-Federal cooperative program to improve poultry and poultry products by controlling certain egg-transmitted and hatchery-disseminated diseases. Under NPIP, breeding flocks and hatcheries are classified as being clean of specific poultry diseases, thereby enabling producers to purchase stock that are tested clean of these diseases. APHIS provides support in the form of program coordination; laboratory support; biennial regional and national conferences; and publication of provisions, lists of participants, and statistical reports.

-- Noxious weeds - The Agency is authorized by the Federal Noxious Weeds Act of 1974, to carry out a program that works with State and local agencies to detect and prevent newly found or not yet widely established weeds from damaging U.S. agriculture. The noxious weeds program includes inspections at ports-of-entry, surveys to determine the scope of infestations, eradication feasibility studies, and eradication projects.

-- Pink bollworm - The purpose of the pink bollworm program is to prevent pink bollworm from spreading to noninfested areas. APHIS works with State agencies, grower organizations, and cotton producers to meet that goal. The pest is fairly widespread in the Cotton Belt from southern California through Texas, with limited areas of infestation occurring in Arkansas and Louisiana. Work includes quarantine enforcement, trapping, methods development, and operating a sterile-moth rearing facility. The pink bollworm is a serious pest of cotton but can propagate on many other plant species in the United States.

-- Poultry diseases - The purpose of the poultry diseases program is to protect the Nation's $13 billion poultry industry from losses due to highly infectious diseases such as exotic Newcastle disease (VVND), avian influenza, Salmonella enteritidis, and chlamydiosis (psittacosis-ornithosis). Program methods include quarantine and observation of all avian species entering the United States, surveillance, research, diagnostic testing of samples, and tracing the source and movement of disease when found.

-- Pseudorabies - APHIS participates in a cooperative Federal-State-industry program to eradicate pseudorabies, a herpes virus causing reproductive problems including abortion and stillborn death in neonatal pigs. The program began in January 1989, and will require an estimated 10 years to complete. APHIS provides national program coordination, technical advice, regulatory assistance, public information, and recordkeeping. In FY 1989, 30 States received direct support from APHIS for programs to eradicate or control pseudorabies. All States are expected to be actively involved in pseudorabies eradication by the end of FY 1990.

-- Swine health protection - APHIS cooperates with the States to protect the Nation's $10 billion swine industry from the introduction of such harmful foreign diseases as hog cholera, African swine fever, and foot-and-mouth disease. States may enforce their laws and regulations in lieu of Federal regulations provided they are at least equivalent to the Federal requirements. The State must adequately enforce such laws and requirements, and maintain records and reports of enforcement activities. Otherwise, APHIS must assume a primary enforcement role.

Program activities include searching for illegal garbage feeders, and surveying for African swine fever and hog cholera by testing swine slaughter serum samples from high risk areas. The primary activity in States where garbage feeding is allowed is the enforcement of regulations requiring the heat treatment of garbage, to kill harmful organisms prior to being fed to swine.

-- Tuberculosis - The goal of this program is the eradication of bovine tuberculosis (TB) from domestic livestock. Primary program tasks include the traceback and testing of herds from which infected animals were identified at slaughter, testing of suspect cattle to identify positive cases, and full epidemiological investigation to identify sources of infection and possible exposure to other herds. Restrictions are placed on the interstate movement of cattle that are reactors, exposed, or suspects. Limited indemnities are provided to owners of TB-infected animals destroyed in connection with the program.

-- Witchweed - APHIS cooperates with State and local governments, industry groups, and farmers to control witchweed and prevent its spread. The program includes survey, regulatory, eradication, and suppression activities.

Witchweed is a parasitic plant that attacks corn, sorghum, sugarcane, rice, and more than 60 different species of the grass family. Witchweed kills its host by robbing it of water and nutrients, thus preventing the crop from growing and producing grain. One plant can produce 500,000 microscopic size seeds which can remain alive in soil for more than a decade.

The levels of pest and disease management activity are shown by the selected examples that follow:

	1989 Actual	1990 Estimated	1991 Estimated
ADC Operations:			
Number of livestock protected:			
Sheep and goats	7,850,000	8,085,706	8,242,710
Cattle	10,799,326	11,021,336	11,235,343
Crop acres protected:			
Small grains	671,354	691,495	704,922
Sunflowers	243,150	250,445	255,308
Fruit and nut orchards	135,489	139,554	142,264
Hay, alfalfa, and pasture	275,698	283,969	289,483
Citrus	36,000	37,080	37,800
Corn	45,989	47,369	48,289
Soybeans	17,583	17,110	17,462
Vineyards	115,412	118,474	121,182
Range and forest acres protected:			
Range	8,420,000	8,672,600	8,841,000
Forest	1,121,650	1,155,300	1,177,733
Health and safety accomplishments:			
Airports (prevent bird strikes)	311	313	314
Rabies projects	38	39	40
Plague surveillance projects	285	294	300
Number of requests for assistance:			
Agriculture	54,008	55,552	56,581
Urban interests	7,089	7,189	7,256
Human health and safety	17,837	18,298	18,605
Industrial facilities	915	927	935
Natural resources	613	622	628
Animal Health Compliance and Enforcement:			
Inspections conducted at livestock markets and other concentration points	16,899	16,662	12,996
Inspections conducted at slaughter establishments	4,902	4,833	3,770
Biocontrol:			
Parasites released (thousands):			
Corn Borer	--	40	50
Aphid Biocontrol (RWA)	540	600	700
Colorado potato beetle	110	100	100
Diffuse and spotted knapweed	6,000	6,000	6,000
Leafy spurge	31	35	50
Boll Weevil:			
Cumulative acres treated (thousands)			
High Plains	350	550	650
SE eradication	4,588	2,800	520
SW eradication:			
Expanded eradication zone	500	190	20
Eradicated zone	--	--	--

	1989 Actual	1990 Estimated	1991 Estimated
Brucellosis:			
Class Free status States	29	31	33
Class Free and A status States	--	--	--
Class A status States	18	18	18
Class B status States	6	4	2
Class B and C status States	--	--	--
Class C status States	--	--	--
Total number of quarantined herds at end of year	1,411	1,283	1,026
Swine:			
Percentage of eligible slaughter swine sampled	67	35	30
States with zero infection	34	38	44
Cattle Ticks:			
Infested premises under treatment outside of quarantine zone at end of FY--Texas	2	4	4
Infested premises under treatment inside quarantine zone at end of FY--Texas	14	16	16
Premises freed of ticks (cumulative) Puerto Rico	41,300	50,100	11,000
Grasshopper and Mormon Cricket:			
Cumulative acres treated (thousands)	107	2,000	--
Gypsy Moth:			
Cumulative acres treated (thousands)	12	8	8
Imported Fire Ant:			
Cumulative acres treated (thousands)	--	--	--
Miscellaneous Plant and Animal Diseases:			
Scrapie:			
Number of infected flocks found	77	45	80
Number of exposed flocks under surveillance	290	172	310
National Poultry Improvement Plan:			
Number of States classified as U.S. Pullorum Typhoid Clean	38	42	48
Number of egg and meat-type breeding flocks in Plan	3,984	4,000	4,100
Number of water fowl, exhibition poultry and game bird breeding flocks in Plan	2,853	2,900	3,000
Number of States classified as U.S. Mycophasma Gallisepticum Clean (turkey)	10	12	14
Pink Bollworm:			
Sterile insects released (millions)	820	820	820
Pseudorabies:			
States included in the National pseudorabies eradication program	34	50	50
Known infected herds	6,567	8,000	9,000
Market/Slaughter surveillance	417,884	300,000	300,000
Swine Health Protection:			
Number of garbage inspections	47,333	47,500	48,000
Number of violations of the SHP Act	750	750	800

	1989 Actual	1990 Estimated	1991 Estimated
Tuberculosis:			
States accredited free	41	42	43
Herds located	15	8	6
Herds depopulated (per year)	13	--	--
Witchweed:			
Total acres released from quarantine	12,500	14,000	15,000

4. Animal care programs -- APHIS carries out activities designed to ensure the humane care and handling of animals used in research, exhibition, or the wholesale pet trade. The Agency is also responsible for administering the Horse Protection Act, which prohibits the showing, selling, or exhibition of sored horses.

The statutory authority for this work is contained in the Animal Welfare Act of 1966 and its subsequent amendments; and the Horse Protection Act of 1970. The activities carried out are as follows:

-- Animal Welfare - Under the Animal Welfare Act, APHIS is responsible for ensuring the humane care and treatment of warm blooded animals used for research or exhibition, or wholesaled as pets. Also, APHIS is responsible for ensuring the humane care of regulated animals when transported in interstate and intrastate commerce. Methods used to conduct the program are investigation of complaints, inspection of all facilities covered under the Act, and training of inspectors.

-- Horse Protection - APHIS is responsible for the enforcement of the Horse Protection Act of 1970. The Act prohibits the showing or selling of sored horses. Soring is the practice of causing a horse to improve its gait by the application or use of chemicals, cuts, burns, tacks, irritating devices, or overwork. Compliance efforts include APHIS inspections at horse shows and a form of industry self-regulation, the Designated Qualified Person program.

The levels of animal care activity are shown by the selected examples that follow:

	1989 Actual	1990 Estimated	1991 Estimated
Animal Welfare:			
Complaints investigated and resolved	962	1,050	1,175
Number of inspections conducted at licensees and/or registrants	11,056	15,000	18,750
Number of inspections conducted at air terminals	771	2,750	3,400
Number of violations processed	495	575	700
Horse Protection:			
Staff days and/or nights of inspecting or monitoring horse shows and sales	270	275	570

5. Scientific and technical services -- APHIS develops methods to control animals and pests that are detrimental to agriculture, other wildlife, and public safety. The Agency's regulatory structure brings the benefits of genetic research to the marketplace, while protecting against the release of potentially harmful organisms into the environment. APHIS also conducts diagnostic laboratory activities that support the Agency's veterinary disease prevention, detection, control, and eradication programs. In addition, it supports the APHIS biotechnology program by ensuring that the veterinary biologicals developed for combatting disease are

potent, safe, and pure. It also provides and directs technology development in coordination with other groups in APHIS to support plant protection programs of the Agency and its cooperators at the State, national, and international levels.

The statutory authority supporting this work is contained in 7 U.S.C. 7-7b, 8, 11, 15, 17, 30, 54, 55, 429, and 3801; 15 U.S.C. 44; 19 U.S.C 4; 21 U.S.C. 4, 5, and 45; 46 U.S.C. 15; and 49 U.S.C. 20. The principal legislative authority for these activities is contained in the Act of May 29, 1884; Act of August 30, 1890; Act of February 2, 1903; Act of March 3, 1905; Tariff Act of June 17, 1930; Act of September 21, 1944; the Organic Act of 1944, as amended by P.L. 94-231, enacted March 15, 1976; Act of February 28, 1947; Act of September 6, 1961; Act of July 2, 1962; the Virus-Serum-Toxin Act of March 14, 1913; and the ADC Act of 1931.

-- ADC Methods Development - The ADC program was transferred to APHIS on December 29, 1985, pursuant to P.L. 99-190; H.J. Res. 465, 99 Cong. 1st Sess. 1985. From 1939 until its transfer to APHIS, the program was located in the U.S. Department of the Interior (USDI), within the Fish and Wildlife Service (FWS). The basic program mission is to protect American agriculture and other resources through identification, demonstration, and application of the best methods of controlling wild and free ranging animals that are detrimental to agriculture, other wildlife, and public safety. In support of this mission, research and development of control techniques and devices for the operations program is provided by the program at the Denver Wildlife Research Center. The program conducts research to maintain current pesticide registrations with the EPA for products such as strychnine and compound 1080. Additionally, new or improved control tools such as soft traps and electroshock techniques are researched. Other methods investigated include behavior modification and taste aversion.

-- Biotechnology - In FY 1987, APHIS laid the foundation for this program by becoming the first Federal Agency to implement final regulations under the "coordinated framework for the regulation of biotechnology." This policy was established by the President's Office of Science and Technology to develop a government-wide regulatory framework for the biotechnology industry. APHIS, under its regulatory authority, approves applications from the biotechnology industry for field trials to test a wide variety of plants and micro-organisms. Additionally, the Agency licenses genetically engineered biological products. APHIS works through appropriate diplomatic channels to promote internationally consistent regulations for the field testing, movement, and importation of biotechnologically derived products.

-- Plant methods development laboratories - The Agency conducts activities aimed at developing new methods for the control or eradication of various harmful plants and plant pests. Methods under study range from the simple hot water treatment of imported fruits to identifying natural enemies of pests. One goal of the program, is to develop methods that could lead to reduced use of chemicals for the control of pests. The program conducts field trials, under controlled conditions, of promising new methods or control tools.

-- Veterinary biologics - The goal of this program is to prevent the production and distribution of biological products that are ineffective, impure, unsafe, and impotent. Program activities include the licensing of all products, inspection of licensed facilities, and testing of a statistically based sampling of licensed products. Biological products produced for distribution and sale both inter-state and intra-state come under the purview of this program.

-- Veterinary diagnostics - The Agency maintains a diagnostic program for various diseases which threaten livestock, poultry, and related industries of the United States. This program consists of diagnostic laboratory activities which include diagnostic assistance to the livestock and poultry industries as well as to the States. The Agency has facilities located at Ames, Iowa, and Plum Island, New York. Services include differential diagnosis, blood and tissue examination, culture analysis, toxicological testing, and reference antigen production. The program also provides training in domestic and foreign animal disease diagnosis.

The levels of scientific and technical services activity are shown by the selected examples that follow:

	1989 Actual	1990 Estimated	1991 Estimated
Plant Methods Development:			
Field trials conducted on new Mexfly traps and lures	7	8	8
Quality assurance sampling sites for witchweed	38	65	80
Species of biocontrol organisms evaluated	11	13	16
Imported fire ant regulatory control field tests	39	51	64
Noxious weeds regulatory treatment investigations	5	20	25
Agency responded to the following number of requests for assistance:			
Witchweed	460	600	700
Biocontrol	45	50	60
Noxious Weeds	45	60	60
Veterinary Biologics:			
Number of serials processed	11,592	12,000	12,000
Percent of serials tested for:			
Potency	14.84	16	16
Purity	7.51	10	10
Sterility	7.76	10	10
Safety	0.04	1	1
Chemistry	0.47	1	1
Number of inspections:			
In-depth	44	44	48
Follow-up	11	12	16
Special	27	27	31
Veterinary Diagnostics:			
Number of import-export health requirement tests conducted at National Veterinary Service Laboratories (NVSL)	140,000	145,000	145,000
Number of import-export health requirement tests conducted at Foreign Animal Diseases Diagnostic Laboratories (FADDL).	21,000	22,000	22,000
Number of fraudulent blood screening tests conducted	386,000	380,000	380,000
Number of diagnostic tests conducted at NVSL	350,000	355,000	355,000
Volume of reagents shipped (ml):			
Shipped by NVSL	3,100,000	3,200,000	3,200,000
Shipped by FADDL	200,000	200,000	200,000
Number of days of training provided:			
International students	558	600	600
Domestic students	533	600	600

GAO AUDITS

Report No.	Title	Date Issued
HRD-88-89	Federal Costs for care of the Silver Spring Monkeys	6/30/88

OIG AUDITS

Report No.	Title	Date Issued
33003-1-HY	Quarantine Controls over Contaminated Herds	12/22/88
33003-1-CH	Llama Importation Activities	9/15/89

JUSTIFICATION OF INCREASES AND DECREASES

(1) A net increase of $12,847,000 for pest and disease exclusion activities, consisting of:

(a) An increase of $3,115,000 for the 1989 pay raise and $1,038,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) A decrease of $1,916,000 to eliminate the Africanized honey bee program ($1,916,000 available in FY 1990).

Need for Change. The Africanized honey bee (AHB) program's original goal was to stop the northward migration of AHB at the Isthmus of Tehuantepec in southern Mexico. Realizing that impeding the AHB migration to the United States would not be possible, an alternate objective was adopted to retard the northward migration of the bee and to develop techniques to manage the European honeybee in an Africanized area. The AHB is currently established north of the Isthmus of Tehuantepec where most of the cooperative program's activities are conducted. Recently, AHB has also been detected within 265 miles of the Texas-Mexico border. Since it has been determined that the AHB will arrive in the United States sometime in FY 1991, further funding is not needed for an international based program.

Nature of Change. Scientists and APHIS personnel have begun developing and testing technologies and strategies to mitigate the impact of AHB upon its arrival in the United States. In FY 1990, APHIS will improve its capability to provide adequate protection to the honey bee industry from various pests, including AHB, through the honey bee pest program.

(c) An increase of $7,403,000 for the agricultural quarantine inspection program ($64,615,000 available in FY 1990).

Need for Change. The agricultural quarantine inspection (AQI) program is the Nation's major defense in preventing agricultural pests and diseases from entering into the United States. The program's workload continues to increase as the volume of cargo and amount of international air and sea passenger traffic increase, 34 million passengers in FY 1989 versus 33 million in FY 1988. In addition, approximately 54 million automobiles entered in the U.S. this year from Mexico and Canada with the potential of introducing pests, an increase of approximately 1 million in 1 year. The program needs to increase the level of quarantine activities to meet this growing international trade and travel. The future of the Nation's largest industry, agriculture, with assets totalling approximately $965 billion, relies largely on the effectiveness of the AQI program. The program needs increased funding to be completely effective in protecting U.S. agriculture.

Nature of Change. With increased funding, APHIS can further implement the new and more efficient methods and systems recommended in the Blue Ribbon Panel Report. APHIS will increase staffing at high-risk ports-of-entry and expand the usage of detector dogs and X-ray machines. Automation will continue in several facets of the program. Examples are, the expansion of the pest information network (PINET) system and the continued implementation of the Automated Commercial System. Implementation of the EXCERPT System for export certification will also continue as planned.

(d) An increase of $851,000 for the foot-and-mouth disease program ($3,011,000 available in FY 1990).

Need for Change. Since 1974, APHIS has conducted a cooperative vaccination and control program in Colombia and Panama designed to prevent foot-and-mouth disease (FMD) from entering Panama, Central America, Mexico, and the United States from South America. APHIS also maintains exotic disease prevention programs in Mexico and the Central American nations. Also, APHIS has relied on intermittent reports from the Pan-American Health Organization (PAHO), which is coordinating the hemispheric FMD eradication program, to provide information on major diseases or current outbreaks in Latin America. However, the Agency needs to gather current information on FMD and other exotic animal diseases in a more timely manner and provide more direct support to the PAHO eradication effort.

Nature of Change. In FY 1991, APHIS will consolidate its efforts in the Darien Gap and in Mexico and Central America under FMD and Other Exotic Animal Diseases. In the past, the FMD program in Mexico and Central America were funded in the International Services Animal Health-line item. APHIS will also establish a veterinary liaison position in Rio de Janeiro, Brazil, to support the initiatives of PAHO. The veterinary liaison person would actively participate in PAHO's hemispheric FMD eradication program and would maintain contact with people who have knowledge of local FMD and other disease situations. This position is designed to directly support the efforts of PAHO to eradicate FMD, and coordinate U.S. technical cooperation and orientation to the eradication program. The APHIS representative will work directly with PAHO on an ongoing basis, which will enable the Agency to track major diseases and vectors faster, and prevent FMD exposure to the United States.

(e) An increase of $144,000 for the Import-Export program ($8,486,000 available in FY 1990).

Need for Change. The program anticipates higher costs in FY 1991 due to increases in the cost of program supplies and materials such as testing supplies, coveralls, boots, and animal feed.

Nature of Change. The additional funds will offset the impact of recent increases in the cost of key items, thus enabling the program to maintain activities at the current level.

(f) An increase of $96,000 for International Programs ($4,238,000 available in FY 1990).

Need for Change. The program anticipates higher costs in FY 1991 due to increases in the cost of program inputs such as rent, communications, supplies, and travel.

Nature of Change. The additional funds will offset the impact of recent increases in the cost of key items, thus enabling the program to maintain activities at the current level.

(g) An increase of $490,000 for the Mediterranean fruit fly program ($9,729,000 available in FY 1990).

Need for Change. The objective of APHIS' Mediterranean fruit fly (Medfly) program is to prevent sustained infestations of this dangerous pest of fruits and vegetables from occurring in the continental United States, Puerto Rico, the U.S. Virgin Islands, and north of the 16° parallel in Mexico and Guatemala. In FY 1989, California suffered a multitude of Medfly infestations. Hawaii is currently infested with Medflies and is considered a possible source of infiltration. APHIS has constructed a sterile fruit fly rearing facility in Waimanalo, Hawaii, operation of which is expected to commence in FY 1990.

Nature of Change. APHIS would operate the Waimanalo, Hawaii, sterile fruit fly rearing facility at sufficient capacity to support research and eradication projects. This increase would provide partial funding for the facility's operation. The facility would produce 50 million sterile flies per week for test eradication efforts on Kauai and for use in emergency outbreaks.

(h) An increase of $170,000 for the Mexican fruit fly program ($1,504,000 available in FY 1990).

Need for Change. The Mexican fruit fly (Mexfly) is native to most of Mexico and Central America and affects fruits such as citrus and mangoes. Infestations of this pest occur annually in the lower Rio Grande Valley of Texas and makes other citrus growing States, including Arizona, California, Florida, Louisiana, and New Mexico, vulnerable to infestations.

APHIS works in close cooperation with Mexico to prevent infiltration of Mexfly into the United States. Infiltration could occur by flies migrating across the border or from infested fruit shipped to or through California and Arizona. Partial funding for this effort was provided in FY 1989, however more funding is needed to assist in reducing populations in certain production areas of Mexico considered potential sources of infestation.

Nature of Change. APHIS will increase its survey and control activities in Mexico, requiring an increase in the number of sterile flies produced at the Mission, Texas, facility.

(i) An increase of $1,456,000 for the Screwworm program ($31,607,000 available in FY 1990).

Need for change. Most of the funds for this program are spent in Mexico, a country whose economic stability has been declining over the past five years. Since Fiscal Year 1985, funding for this program has decreased by $5.6 million, nearly 14 percent, while the cost of doing business in Mexico has sky rocketed. Inflation has been as high as 200 percent in December 1987 and is now hovering at an average of 17 percent. However, in the case of the Screwworm program some costs are increasing even more than the national average. Air operations and electricity, which comprise more than 25 percent of the costs, recently increased by 40 percent.

Nature of Change. This increase will enable the screwworm program to partially cover increased program costs, such as airplane rental.

(2) A net increase of $4,359,000 for plant and animal health monitoring activities, consisting of:

(a) An increase of $263,000 for the 1989 pay raise and $87,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) An increase of $3,683,000 for the animal disease detection program ($5,320,000 available in FY 1990).

Need for Change. In recent years APHIS has relied heavily on the inspection of animals in transit or at slaughter to intercept and eliminate animal diseases of economic importance such as brucellosis, tuberculosis, and others. In view of the substantial progress toward eliminating or reducing infection levels of these diseases and the emergence of other concerns, a rethinking of the Agency's disease prevention strategy is in order. The public, in both the United States and in export markets, is demanding a safe, wholesome food supply free from violative residues and bacterial contamination. Producers, in addition, face economic losses from noninfectious, chronic, subclinical, environmental, genetic, and management-induced diseases. Production practices and disease prevention strategies for use at the farm level must be developed which are consistent with the needs of consumers and producers. In order for this to occur, APHIS must assemble the necessary technical expertise to establish scientific credibility and develop the appropriate information on the occurrence and economics of animal health events. This shift from a reactive to a proactive approach is needed to effectively address the growing public concerns over food safety and quality.

Nature of Change. The National Animal Health Monitoring System (NAHMS), a key information gathering network established by APHIS to collect, evaluate, and disseminate critical and reliable information on animal disease problems and their costs to a broad base of potential users, would be significantly expanded to allow establishment of a National Center for Epidemiology and Animal Health (NCEAH). This would be accomplished by adding to the program teams of multidisciplinary experts in epidemiology, economics, and statistics, and by expanding and/or initiating projects designed to acquire and assess the information necessary to respond to producer and public needs. In FY 1990, 19 States will be participating in the program with at least eight more expected to join in FY 1991. A National swine survey and a field test of a National dairy study have begun in FY 1990. Monitoring of swine health and productivity will continue into FY 1991 involving 1,400 herds in 18 states. The National dairy study will begin in the spring of FY 1991 in 25 to 28 States with 1,500 to 2,500 herds participating. Monitoring of beef and poultry operations will be field tested in FY 1991, as new species are added to the aggregate NAHMS survey.

(c) An increase of $326,000 for the pest detection program ($3,717,000 available in FY 1990).

Need for change. The pest detection program is designed to monitor the spread of endemic and foreign plant pests and diseases. APHIS maintains a computer database, the National Agricultural Pest Information System (NAPIS), which collects information from cooperators in the 50 States on plant pests and pathogens. Approximately half of the program's funds go to the States to enhance their survey programs and database management systems. Information collected in NAPIS is available to the States, universities, industry, and farmers to develop pest control strategies. Additionally, the program carries out field surveys of various agricultural pests and diseases. As a result of pathway studies carried out by APHIS in 1988, less costly monitoring methods are now available for 13 exotic pests being tracked by the program.

Nature of change. The increase in funding will provide increased international cooperative surveys for a variety of targeted pests such as the khapra beetle, oriental fruit fly, karnal bunt, members of the Anastrepha complex, mango seed weevil, certain diseases of citrus, and the golden nematode. APHIS will also increase the intensity of surveys in certain geographical areas, primarily within Central America and the Caribbean.

(3) A net decrease of $4,630,000 for pest and disease management programs, consisting of:

(a) An increase of $3,235,000 for the 1989 pay raise and $1,079,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) An increase of $1,386,000 for animal damage control operations ($22,081,000 available in FY 1990).

Need for Change. The Animal Damage Control (ADC) mission is to provide leadership in the science and practice of wildlife damage control in order to protect America's agricultural, industrial, and natural resources, and to safeguard public health and safety. Increasing requests from States, local governments, and private entities for new wildlife damage programs are placing demands on ADC for additional supplies, materials, and equipment. In addition to meeting the demands for new programs and new technology, the costs of maintaining current operational program are increasing.

Nature of Change. Funds would be used to support increased operating costs due to increasing environmental sensitivity and increased personnel costs. In addition, funds would be used to begin a planned program for replacement, training, and development of personnel in order to maintain a cadre of professional managers and biologists necessary to meet the increasingly complex problems of wildlife damage management.

(c) A decrease of $2,591,000 for the animal health compliance and enforcement program ($14,493,000 available in FY 1990).

Need for Change. Program emphasis is changing from reactive to proactive, with increased emphasis on animal health and productivity monitoring and a reduced focus on inspections. Progress towards eradication of brucellosis and tuberculosis creates a climate where such change is possible.

Nature of Change. Inspections of slaughter establishments will be reduced in frequency, but will be maintained at levels adequate to safeguard the Nation's animal health, particularly in areas free of disease.

(d) An increase of $1,625,000 for the biocontrol program ($5,482,000 available in FY 1990).

Need for Change. APHIS has made significant contributions to the acquisition, production, and distribution of biological control agents. Such efforts are saving the nation's farmers millions of dollars through reduced pesticide usage. The APHIS biological control program is an important and integral part of State/Federal cooperative efforts in the distribution of biological agents for cereal leaf beetle, alfalfa weevil, Mexican bean beetle, citrus blackfly, citrus whitefly, Colorado potato beetle, Russian wheat aphid (RWA), diffuse and spotted knapweed, and leafy spurge. RWA was funded as a separate line item in FY 1990. There is a need to increase or expand these programs because of public environmental concerns such as water quality, increasing pest resistance to pesticides, and the loss of chemicals because of carcinogenic concerns and costs incurred by the re-registration process. The use of biological control techniques will help assure the continued competitiveness of American agricultural products in world markets.

Nature of Change. APHIS will assist State cooperators in rearing, field collecting, and redistributing natural enemies for the RWA and leafy spurge in the Western United States. The Agency would also be able to expand the current program by developing and testing additional biological control agents. The Agency would expand initial steps towards completing the development and staffing of a National Biological Control Service Institute (NBCSI). The Institute provides a central focus to promote and expedite biological control and provide such service components as foreign collection, quarantine screening, documentation, technology transfer, and operational support.

(e) A decrease of $3,168,000 for the boll weevil control program ($12,841,000 available in FY 1990).

Need for Change. The boll weevil activity consists of three cooperative programs: the High Plains control program, the Southeast eradication program and the Southwest eradication program. The goal of the High Plains program is to prevent the boll weevil from spreading into the non-infested areas of west Texas from the rolling plains area to the South and West. APHIS began this program in 1963 in the Presidio Valley and Texas High Plains. The Southeast eradication program has eradicated the boll weevil from Virginia, North Carolina, and 95 percent of South Carolina. Growers in the eradicated areas report substantial benefits as a result of this program. Because of these successes, the program was expanded to include Georgia, Alabama, and Florida. The 4-year eradication project in Georgia, Alabama, and northern Florida is nearing completion and will move to the maintenance stage. In the Southwest, the original eradication area, which includes parts of southern California, western Arizona, and northern Mexico near the California border, was declared eradicated for boll weevil in 1987.

This program was expanded in FY 1988 to include central Arizona and northern Mexico near the Arizona border, and is now proceeding rapidly.

Nature of Change. APHIS will continue the boll weevil program in the Southeast and Southwest eradication programs, but with reduced funding. During 1989, the Southeast Boll Weevil Foundation experienced financial difficulties in part due to increased infestations as a result of a warm winter and frequent rains during the pesticide applications season. As a result, an emergency was declared, and USDA funds helped the Foundation to continue operations. Efforts are being made to put the program on a sound financial basis. The temporary increase in the Federal costs of the Southeast boll weevil program in 1990 is not expected to continue in 1991. Funding for the Texas High Plains will continue at the current level. APHIS provides 30 percent of the necessary funds for these programs with the cooperators providing the balance.

(f) An increase of $1,103,000 for the brucellosis program ($61,927,000 available in FY 1990).

Need for Change. The program anticipates higher costs in FY 1991 due to increases in the cost of program supplies and materials such as test kits, reagents, coveralls, and boots. Also, due to having made no vehicle purchases in 1988 or 1989, a significant portion of the Veterinary Services vehicle fleet is in unsafe condition and should be replaced. A recent survey revealed that at the beginning of FY 1990, 40 percent of the Agency's vehicles were eligible for replacement due to age and/or mileage considerations.

Nature of Change. The additional funds will offset the impact of recent increases in the cost of key items, thus enabling the program to maintain activities at the current level. In addition, a program of selective vehicle replacements will be initiated.

(g) A decrease of $1,870,000 for the cattle tick program ($6,172,000 available in FY 1990).

Need for Change. APHIS participates in cooperative cattle tick eradication programs in Texas and the Commonwealth of Puerto Rico. The Puerto Rico program, initiated in 1979, receives the majority of its funding from a Food and Nutrition Service (FNS) block grant of approximately $10 million per year. In FY 1991, the FNS block grant will be transferred to the Department of Health and Human Services. APHIS activities in connection with the Puerto Rico program will cease in FY 1991.

Nature of Change. APHIS will no longer provide funding to cover the cost of Federal supervisory personnel, equipment, pesticides, gasoline, and vehicle maintenance in connection with the Puerto Rico program. The Texas program will continue at the present level.

(h) An increase of $1,264,000 to establish the citrus canker program ($0 available in FY 1990).

Need for Change. This disease attacks a wide variety of citrus, and can cause severe losses as a result of damage to fruit. In 1986, infestations of the more serious Asiatic (A)-strain of citrus canker were detected in Manatee County, Florida. This has led to significant concern regarding potential damage from the disease. The APHIS Citrus Canker committee met in 1989. According to their study, cost-benefit ratios indicated that it would be economically beneficial for APHIS to supplement the A-strain eradication program in Florida. In past years, APHIS has funded surveillance, regulatory, control and eradication activities from the Miscellaneous Plant Pests program, in response to several major outbreaks of citrus canker. Estimated value of the crops at risk is over $1 billion.

Nature of Change. This increase will enable APHIS to provide supervisory personnel for regulatory and surveillance activities and share operational costs and costs of tree depopulation with the

State of Florida. Eradication efforts will be concentrated in Manatee County, which is now the only county containing the A-strain.

(i) A decrease of $2,562,000 for the grasshopper and Mormon cricket program ($8,517,000 available in FY 1990).

Need for Change. The program to control grasshopper and Mormon cricket infestations in the Western States is evolving into a proactive program, stressing forecasting of pest outbreaks and integrated pest management techniques. The intensive control measures of the past few years have resulted in large reductions in the grasshopper population, and new techniques are improving responses to infestations. Due to continued low grasshopper populations, APHIS anticipates that adequate funds will be carried over into FY 1991 to meet the need for control efforts.

Nature of Change. Activities funded under the grasshopper program will continue to include annual surveys in cooperation with the State governments, spraying programs, and methods development aimed at improving survey methodology and refining response techniques.

(j) An increase of $100,000 for the gypsy moth program ($4,601,000 available in FY 1990).

Need for Change. The program anticipates higher costs in FY 1991 due to increases in the cost of program inputs such as survey supplies, and transportation.

Nature of Change. The additional funds will offset the impact of recent increases in the cost of key items, thus enabling the program to maintain activities at the current level.

(k) An increase of $140,000 for the honeybee pest program ($351,000 available in FY 1990).

Need for Change. The approach of Africanized honeybees, the Varroa mite outbreak in FY 1988, and the honeybee tracheal mite outbreak in FY 1984, have caused widespread concern about protection for the honeybee industry. The magnitude of the economic losses possible from these pests have increased the need for standardized inspection and certification procedures for all honeybee pests.

Nature of Change. APHIS would provide additional assistance to the National Plant Board and Apiary Inspectors of America to coordinate the development of a national honeybee certification program that establishes uniform standards for interstate movement. APHIS would also provide additional support to States in dealing with current honeybee pests and AHB once it reaches the United States.

(l) A decrease of $2,722,000 for the imported fire ant program ($4,232,000 available in FY 1990).

Need for Change. The imported fire ant is currently established in 11 Southern States, with additional isolated finds in Arizona, California, and Maryland. Since 1977, the control program has been severely hampered by the absence of an approved pesticide for widespread agricultural use. APHIS continues to regulate infested States and work with industry, and the Agricultural Research Service in the testing of various control agents for this pest. Until an effective control agent is found, the Agency will have little demand for cooperative control programs from the States, and will limit its activities to testing of potential treatments and some regulatory work.

Nature of Change. APHIS will continue developing and testing new methods of fire ant control. Involvement in extended survey activities in the infested States, currently funded under cooperative agreements with the States, will be eliminated. The Agency will limit its involvement to those survey and regulatory activities necessary to prevent interstate spread of the pest.

(m) An increase of $846,000 for miscellaneous plant and animal diseases and pests ($2,342,000 available in FY 1990).

Need for Change. Funds appropriated for this line item are used to control and prevent the spread of certain plant and animal pests and diseases of potential economic significance that are not covered by a budget line item. Plant programs usually funded from this line item are Japanese beetle, potato wart, black stem rust (barberry eradication), and white garden snail. Animal programs funded include equine piroplasmosis, equine infectious anemia, African horse sickness, contagious equine metritis, bluetongue, Venezuelan equine encephalitis, and bovine spongiform encephalopathy.

In FY 1990, Congress appropriated funds for Scrapie as separate line-item. Previously, scrapie had been funded under the Miscellaneous Animal Diseases line-item. APHIS believes the quarantine and depopulation activities can be adequately administered within the miscellaneous plant and animal pests and diseases program.

Nature of Change. Sufficient funding will be added to the miscellaneous plant and animal diseases and pests line-item to allow current scrapie program activities to continue.

(n) A decrease of $264,000 for the noxious weeds program ($842,000 available in FY 1990).

Need for Change. In FY 1989, APHIS completed surveys in three States for common crupina: Oregon, Idaho, and Washington. APHIS and the individual State Departments of Agriculture began small scale eradication projects for common crupina in these three States. In FY 1990, a full scale eradication program for common crupina will begin. In Washington, delimiting and control measures on additional infestations will be implemented. Delimiting surveys are conducted at a later date, after common crupina is initially discovered. The surveys determine the extent of the infestation. In Oregon and Idaho, boundary and highway treatments will be started and we will begin treatments on additional infestations. By FY 1991, the eradication programs should be in place and running smoothly. The State governments should have the capability to effectively undertake local eradication programs.

Nature of Change. APHIS will no longer provide funds for cooperative control and eradication activities in the common crupina program. The State governments of Washington, Idaho, and Oregon would now have the responsibility of implementing eradication and control activities.

(o) A decrease of $339,000 for the pink bollworm program ($1,302,000 available in FY 1990).

Need for Change. Since 1968, APHIS has worked with the State of California to keep the pink bollworm from causing economic damage to cotton producers in the San Joaquin Valley. The Agency produces sterile moths at the Phoenix, Arizona, rearing facility, which are released in the San Joaquin Valley to prevent the establishment of pink bollworms in this area. In addition, APHIS has worked closely with the States in surveys and regulatory actions. After 20 years of working with the Agency, the States have gained the necessary knowledge and ability to assume the primary responsibility for maintaining this program.

Nature of Change. Funds will no longer be provided for surveillance, and the Agency will reduce regulatory activities. APHIS will continue to operate the sterile-moth rearing facility; conduct methods trials, such as the demonstration projects in the San Joaquin Valley; and develop management tools which will assist States and producers.

(p) A decrease of $252,000 for the pseudorabies program ($3,292,000 available in FY 1990).

Need for Change. APHIS supports the goal of eradication; however, the Agency believes that industry and States should be in the vanguard of the industry developed ten year eradication plan. States and industry have gained sufficient program expertise to allow for an increased role.

Nature of Change. APHIS will continue to provide direct support for local programs to control or eradicate pseudorabies, but at a slightly reduced level. The Agency will continue to provide national program coordination, technical advice, regulatory assistance, public information, and recordkeeping. This may require restructuring the program timetable to allow completion within 12 to 15 years instead of 10 years as previously envisioned. As an alternative, the States and industry could increase support so that progress can continue toward eradication within 10 years.

(q) A decrease of $898,000 for the Russian wheat aphid program line-item ($898,000 available in FY 1990).

Need for Change. Since Russian wheat aphid (RWA) program activities are carried out at the same facilities and with many of the same scientific staff as other biological control projects, APHIS feels that the program should be included under the Biocontrol line item.

Nature of Change. APHIS will no longer fund the RWA program as an individual line-item. In FY 1991, the program will be moved back into the Biocontrol program.

(r) A decrease of $1,085,000 for the scrapie program ($1,085,000 available in FY 1990).

Need for Change. An effective control and eradication program is hampered by the lack of an effective diagnostic test for scrapie. Consequently, an acceptable program approach has not been agreed upon by APHIS and producers.

Nature of Change. The current separate line-item for scrapie will be eliminated. Sufficient funding will be added to the miscellaneous plant and animal pests and diseases line-item to enable scrapie program activities to continue.

(s) An increase of $343,000 for the remaining programs to cover increased operating costs.

Need for Change. This increase will permit the golden nematode, National Poultry Improvement Plan, Poultry diseases, swine health protection, tuberculosis, and witchweed line items to continue to operate at FY 1990 levels.

Nature of Change. The additional funds will offset the impact of recent increase in the cost of key items, thus enabling the program to maintain activities at the current level.

(4) A net increase of $1,424,000 for animal care activities, consisting of:

(a) An increase of $277,000 for the 1989 pay raise and $93,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) An increase of $869,000 for the animal welfare program ($7,464,000 available in FY 1990).

Need for Change. APHIS is responsible for implementing the 1985 amendments to the Animal Welfare Act. Proposed regulations have been issued for public comment. The nature and volume of comments received with respect to Part 3 make it likely that this section must be reproposed. APHIS fully anticipates these rules will be finalized by FY 1991. These rules will create a need for additional inspectors, overnight travel, vehicles, and public information activities.

Nature of Change. The program will hire up to 11 Veterinary Medical Officers (VMOs) and Animal Health Technicians to augment its field force of inspectors to allow implementation of the new regulations. Additional vehicles will be purchased to equip the new inspectors and replace older vehicles as needed. APHIS will conduct an intensive program of training and public information regarding the new requirements.

(c) An increase of $185,000 for the horse protection program ($159,000 available in FY 1990).

Need for Change. APHIS has received criticism for its inability to monitor an adequate number of horse shows to realistically prevent the soring of horses in certain breeds of performance horses and for not providing sufficient oversight and training of Designated Qualified Persons (DQP's). The timeliness of enforcement actions is also unacceptable to the industry. Moreover, recently enacted regulations which prohibit certain action devices and weighted pads have increased workload both in covering horse shows and in enabling the Agency to follow up on reported violations. This is reflected in recent workload indicators which show a decline in program outputs last year.

Nature of Change. The funds will allow significantly expanded coverage of horse shows by Veterinary Medical Officers (VMO's) and Designated Qualified Persons (DQP's). The frequency of training for VMOs and DQPs will be increased. In addition, current staff shortages in the regulatory enforcement unit will be filled.

(5) A net increase of $6,527,000 for scientific and technical services activities, consisting of:

(a) An increase of $903,000 for the 1989 pay raise and $301,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) An increase of $179,000 for the ADC Methods Development program ($7,326,000 available in FY 1990).

Need for Change. Methods development activities in support of the Animal Damage Control (ADC) operational programs are carried out at the Department's Denver Wildlife Research Center (DWRC) and its satellite research stations. These activities include research and development of control techniques and devices. The program's objective is to protect America's multibillion dollar agricultural industry from animal damage. In addition, it improves public health and safety by providing protection from wildlife that are detrimental to agriculture, other wildlife, and public safety. The program provides information transfers on a broad range of ADC problems and combines physical, biological, and chemical control methods in testing control situations. The program also conducts research to maintain pesticide registrations with the Environmental Protection Agency (EPA) for products such as strychnine and compound 1080.

In FY 1988, the Department began a multi-year effort to bring the Center into compliance with the Good Laboratory Practices (GLP) standards of the EPA. The Center's noncompliance endangers our ability to support current ADC pesticide registrations and to develop new ones, since EPA will reject data that is not developed in compliance with GLP. If the Department does not act, ADC will eventually lose many pesticide registrations.

Nature of Change. The additional funds will offset the impact of recent increase in the cost of key items, thus enabling the program to maintain activiites at the current level.

(c) An increase of $1,642,000 for the biotechnology program ($4,685,000 available in FY 1990.

Need for change. Many genetically engineered products are nearing the commercialization stage, requiring increasingly complex analyses of field tests. Additional staff are necessary if APHIS is to continue providing consistent and timely reviews of requests to field test products. The Department plans to continue efforts to promote the "international harmonization" of biotechnology regulations. Through this initiative, APHIS, as part of the United States delegation, works with foreign governments to develop uniform regulations for the field testing, movement, and importation of genetically engineered products. This effort will help prevent unnecessary trade barriers and facilitate the transfer of American products into foreign markets.

Nature of Change. These funds will be used to meet the Agency's objective of assuring greater consistency in international biotechnology regulations. The funds will be used to hire additional scientific staff, provide training to existing staff, and keep pace with the increasing volume and complexity of permit requests.

(d) An increase of $561,000 for the Plant Methods Development program ($4,823,000 available in FY 1990).

Need for Change. The Plant Methods Centers are currently located in Mission, Texas; Whiteville, North Carolina; Hoboken, New Jersey; and Otis, Massachusetts. This program consists of methods development activities that were previously funded in separate plant protection programs. A recent APHIS reorganization placed all activities related to science and technology into one organization to strengthen the Agency's scientific and technical base. By placing the funding and activities for plant methods development into one program, APHIS has improved its ability to meet the changing needs of U.S. agriculture through technologically advanced control and eradication methods. There is growing concern over the lasting impact of pesticide residues on the environment, increasing pest control costs, pesticide re-registration costs, and pest resistance to existing pesticides. Additional work needs to be done to discover and develop more effective methods of using insecticides and to develop alternatives to pesticides as a measure of controlling plant pest problems.

Nature of Change. Increased funding will support methods development activities at the FY 1990 level in most plant protection programs, including golden nematode, honeybee pests, imported fire ant, and noxious weeds. Pink bollworm methods development activities will be minimally supported. Programs to develop biological controls for the tropical fruit fly, boll weevil, Colorado potato beetle, and heliothis and related moths will also be expanded.

APHIS is also developing a new Plant Methods Development Center system. This system will be composed of a Western Center at Phoenix, Arizona; a Central Center at Mission, Texas; an Eastern Center at Research Triangle Park, North Carolina; and a National Center at Otis, Massachusetts. The Western Center will be responsible for activities concerning pink bollworm in cotton, rangeland grasshopper, and other high-priority needs unique to the Western United States and Northern Pacific area. The Central Center will be responsible for boll weevil eradication, tropical fruit fly control, and biological control pilot testing. The Eastern Center will support witchweed eradication efforts and simultaneously become APHIS' premiere Center for developing new methods in pest detection and exclusion, and agriculture quarantine inspection. The National Center will provide technical assistance for Gypsy Moth control and increase its involvement in sophisticated and pervasive technologies, such as the evaluation of biologically-based control techniques, molecular entomology, and biological risk assessment.

(e) An increase of $685,000 for the veterinary biologics program ($8,523,000 available in FY 1990).

Need for Change. APHIS is being challenged to keep pace with the increasing complexity of product license requests, activities to be monitored, and laboratory analysis of biologics serials. Also, the Agency has assumed additional workload associated with the regulation of intrastate producers of veterinary biologics.

Nature of Change. Increased funding will enable APHIS to meet the regulatory challenges envisioned in FY 1991. Specifically, the Agency will increase staff to ensure timely license application reviews and adequate monitoring of domestic manufactures and foreign firms that are permitted to distribute products in the United States. Funds would also be used to fully investigate and respond to complaints and requests for information from veterinary biologics users.

(f) An increase of $2,256,000 for the veterinary diagnostics program ($12,201,000 available in FY 1990).

Need for Change. APHIS is performing laboratory procedures derived through biotechnology for their disease eradication programs, export testing, and foreign animal and poultry disease diagnostic works. These new procedures are critical because they provide the Agency with the efficiency, accuracy, and timeliness required in these programs. In addition, they enable APHIS to conduct increasingly definitive tests and procedures for decreasing animal and poultry disease losses, enhancement of exports and assurances against entry of foreign animal and poultry diseases.

Nature of Change. Increased funding will provide for diagnostic support, including differential diagnosis and diagnostic laboratory assistance to the livestock and poultry industry of the United States. It will also provide for the development and evaluation of new diagnostic procedures derived through biotechnology with particular emphasis on rapid and accurate identification of foreign animal and poultry diseases. APHIS will purchase sophisticated newly developed equipment and supplies to conduct these new technologies. It will also provide for a more highly technical staff to ensure accuracy and credibility of test results.

(6) An increase of $57,000 for the contingency fund for increased operating costs ($4,443,000 available in FY 1990).

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

SUMMARY OF PROPOSED LEGISLATION

SUMMARY OF INCREASES AND DECREASES--PROPOSED LEGISLATION

	1991		
Item of Change	Current Law	Program Changes	President's Request
Agricultural quarantine inspection.	$74,969,000	-$74,969,000	--
Import-Export........................	9,001,000	-2,201,000	$6,800,000
Veterinary diagnostics.............	14,798,000	-1,768,000	13,030,000
All other............................	269,182,000	--	269,182,000
	367,950,000	-78,938,000	289,012,000

Explanation of Proposed Legislation

When direct beneficiaries can be identified, users of APHIS services should pay for the costs of the service. The Agency proposes to charge for the following services now provided free of charge by APHIS.

- In the agricultural quarantine inspection program, all costs associated with preventing the introduction of agricultural pests and diseases. This includes the cost of passenger, baggage, and cargo inspections at ports-of-entry; development of new detection techniques such as X-rays and detector dogs; and meeting the Agency's responsibilities with respect to the movement of endangered species.
- In the import-export program, includes all activities not previously covered through trust funds. These activities include veterinary care, testing, certification, commuting costs, and quarantine costs not already covered by trust funds.
- In the veterinary diagnostics program, certain laboratory testing and reagent production performed for States, industry, universities, and other Federal agencies.

Legislation will be proposed to assess charges to the users of these services so that the cost of these programs will be borne by the program beneficiaries.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 Actual and Estimated, 1990 and 1991
Pest And Disease Exclusion

	1989		1990		1991	
	Amount	Staff-years	Amount	Staff-years	amount	Staff-years
Alabama............	392,480	10	390,887	10	431,027	11
Alaska.............	298,022	8	296,813	8	327,292	9
Arizona............	1,267,326	33	1,262,184	33	1,391,796	35
Arkansas...........	382,162	10	380,611	10	419,696	11
California.........	11,044,123	218	8,405,875	217	9,269,066	233
Colorado...........	547,394	14	545,173	14	601,156	15
Connecticut........	158,873	4	158,228	4	174,477	4
Delaware...........	262,598	7	261,532	7	288,389	7
Florida............	8,696,224	224	8,660,937	224	9,550,320	240
Georgia............	1,364,482	35	1,358,945	35	1,498,494	37
Hawaii.............	8,903,472	230	8,867,344	230	9,777,922	246
Idaho..............	138,285	4	137,724	4	151,867	4
Illinois...........	1,576,483	41	1,570,086	41	1,731,317	44
Indiana............	358,632	9	357,177	9	393,855	10
Iowa...............	266,532	7	265,450	7	292,709	7
Kansas.............	215,623	6	214,748	6	236,800	6
Kentucky...........	321,951	8	320,645	8	353,571	9
Louisiana..........	1,572,101	41	1,565,722	41	1,726,504	44
Maine..............	530,824	14	528,670	14	582,959	15
Maryland...........	7,171,057	184	7,141,959	184	7,875,359	197
Massachusetts......	3,014,996	78	3,002,762	78	3,311,112	83
Michigan...........	845,589	22	842,158	22	928,638	24
Minnesota..........	513,459	13	511,376	13	563,888	14
Mississippi........	460,432	12	458,564	12	505,653	13
Missouri...........	325,244	8	323,924	8	357,188	9
Montana............	625,925	16	623,385	16	687,400	17
Nebraska...........	53,759	1	53,541	1	59,039	1
Nevada.............	273,310	7	272,201	7	300,153	7
New Hampshire......	77,846	2	77,530	2	85,492	2
New Jersey.........	1,819,323	47	1,811,941	47	1,998,007	50
New Mexico.........	318,310	8	317,018	8	349,573	9
New York...........	7,608,457	195	7,577,584	194	8,355,718	209
North Carolina.....	1,017,700	26	1,013,570	26	1,117,653	28
North Dakota.......	435,128	11	433,362	11	477,864	12
Ohio...............	371,459	10	369,952	10	407,942	11
Oklahoma...........	236,695	6	235,735	6	259,942	6
Oregon.............	1,211,162	31	1,206,247	31	1,330,116	33
Pennsylvania.......	1,610,012	42	1,603,479	42	1,768,139	45
Rhode Island.......	433,474	11	431,715	11	476,047	12
South Carolina.....	1,086,572	28	1,082,163	28	1,193,289	30
South Dakota.......	30,901	1	30,776	1	33,936	1
Tennessee..........	151,493	4	150,878	4	166,372	4
Texas..............	10,256,441	264	10,214,823	263	11,263,773	282
Utah...............	304,594	8	303,358	8	334,510	9
Vermont............	1,112,083	29	1,107,570	29	1,221,306	31
Virginia...........	1,225,595	32	1,220,622	32	1,345,966	34
Washington.........	1,416,392	37	1,410,645	37	1,555,502	40
Washington D.C.....	303,666	8	302,434	8	333,490	9
West Virginia......	143,304	4	142,723	4	157,379	4
Wisconsin..........	188,205	5	187,441	5	206,689	5
Wyoming............	221,213	6	220,315	6	242,939	6
Puerto Rico........	52,925	2	52,710	2	58,123	2
Asia/Pacific.......	970,064	8	966,128	8	1,065,338	9
Central America....	420,943	4	419,235	4	462,286	4

	1989		1990		1991	
	Amount	Staff-years	Amount	Staff-years	Amount	Staff-years
Chile..............	166,567	2	165,891	2	182,926	2
Columbia...........	1,829,942	1	1,822,517	1	2,009,669	1
Dominican Republic.	616,430	0	613,929	0	676,972	0
Europe/Africa......	927,648	8	923,884	8	1,018,757	9
Guatemala..........	4,475,597	8	4,018,226	8	4,430,853	9
Haiti..............	25,371	1	25,268	1	27,863	1
Mexico.............	34,906,307	90	34,764,669	90	38,334,614	96
Panama.............	959,846	3	955,951	3	1,054,114	3
Venezuela..........	147,689	2	147,090	2	162,194	2
Total, Available or Estimate.1/...	128,660,712	2,208	125,106,000	2,205	137,953,000	2,362

1/ FY 1989 obligations include $3,045,000 in obligations from contingency fund releases. The FY 1990 and FY 1991 totals do not include any contingency fund obligations.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 Actual and Estimated, 1990 and 1991
Plant And Animal Health Monitoring

	1989		1990		1991	
	Amount	Staff-years	Amount	Staff-years	Amount	Staff-years
Alabama	88,340	1	92,245	1	136,739	1
Alaska	0	0	0	0	0	0
Arizona	85,251	1	89,019	1	131,957	1
Arkansas	80,033	1	83,570	1	123,880	1
California	751,757	13	784,984	11	1,163,621	12
Colorado	686,601	11	716,948	11	1,062,769	11
Connecticut	243,357	2	112,540	2	166,823	2
Delaware	73,971	1	77,241	1	114,498	1
Florida	356,346	6	357,402	5	529,795	6
Georgia	342,633	5	343,158	5	508,680	5
Hawaii	44,530	1	31,879	0	47,256	1
Idaho	69,891	1	72,981	1	108,183	1
Illinois	74,561	1	63,238	1	93,741	1
Indiana	65,793	1	54,082	1	80,168	1
Iowa	280,557	5	292,958	4	434,266	5
Kansas	81,518	1	85,121	1	126,179	1
Kentucky	47,539	1	49,641	1	73,585	1
Louisiana	85,230	1	88,997	1	131,925	1
Maine	67,019	1	69,981	1	103,736	1
Maryland	2,297,812	37	2,312,628	33	3,428,125	37
Massachusetts	188,428	1	55,182	1	81,800	1
Michigan	308,742	5	322,389	5	477,893	5
Minnesota	132,747	2	123,995	2	183,804	2
Mississippi	112,170	2	117,128	2	173,625	2
Missouri	71,223	1	59,752	1	88,573	1
Montana	69,526	1	72,599	1	107,618	1
Nebraska	47,163	1	49,247	1	73,002	1
Nevada	58,562	1	61,150	1	90,646	1
New Hampshire	49,077	1	51,247	1	75,965	1
New Jersey	143,152	1	62,735	1	92,995	1
New Mexico	69,174	1	72,731	1	107,072	1
New York	172,862	3	1[illegible]5,502	3	267,567	3
North Carolina	77,197	1	90,609	1	119,490	1
North Dakota	39,593	1	41,343	1	61,285	1
Ohio	336,514	5	336,769	5	499,210	5
Oklahoma	62,879	1	51,040	1	75,659	1
Oregon	80,352	1	83,903	1	124,374	1
Pennsylvania	185,950	2	107,425	2	159,241	2
Rhode Island	34,449	1	35,971	1	53,322	1
South Carolina	108,686	2	113,490	2	168,231	2
South Dakota	51,101	1	53,359	1	79,097	1
Tennessee	342,481	4	270,875	4	401,532	4
Texas	241,350	3	182,562	3	270,621	3
Utah	53,420	1	55,781	1	82,687	1
Vermont	59,954	1	62,601	1	92,801	1
Virginia	132,447	2	138,301	2	205,010	2
Washington	65,371	1	68,260	1	101,185	1
Washington D.C	100,171	2	104,599	2	155,052	2
West Virginia	84,436	1	88,168	1	130,695	1
Wisconsin	93,716	2	97,860	1	145,063	2
Wyoming	52,606	1	54,932	1	81,428	1
Puerto Rico	2,281	0	2,382	0	3,531	0
Total, Available or Estimate 1/	9,450,519	144	9,037,000	134	13,396,000	143

1/ Includes contingency fund obligations of $796,039 for FY 1989. Obligations for contingency releases are not included in 1990 and 1991.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 Actual and Estimated, 1990 and 1991
Pest And Disease Management Programs

	1989		1990		1991	
	Amount	Staff-years	Amount	Staff-years	Amount	Staff-years
Alabama............	4,505,561	67	4,828,790	69	4,710,017	66
Alaska.............	138,228	2	154,281	2	144,501	2
Arizona............	3,192,987	48	3,463,788	49	3,337,881	47
Arkansas...........	3,061,271	46	3,316,775	47	3,200,187	45
California.........	5,305,459	79	5,621,581	82	5,546,214	77
Colorado...........	2,801,566	42	3,026,911	43	2,928,697	41
Connecticut........	201,255	3	224,627	3	210,388	3
Delaware...........	205,803	3	229,703	3	215,142	3
Florida............	10,015,105	150	10,578,156	154	10,469,576	146
Georgia............	10,329,983	155	10,829,600	159	10,798,743	151
Hawaii.............	512,528	8	572,047	8	535,786	7
Idaho..............	2,460,161	37	2,645,859	38	2,571,800	36
Illinois...........	1,506,329	23	1,681,259	23	1,574,684	22
Indiana............	975,921	15	1,089,255	15	1,020,207	14
Iowa...............	2,175,911	33	2,328,599	33	2,274,651	32
Kansas.............	1,506,380	23	1,681,315	23	1,574,737	22
Kentucky...........	3,358,929	50	3,649,001	52	3,511,353	49
Louisiana..........	4,018,187	57	4,161,592	59	3,991,451	56
Maine..............	503,818	8	562,326	8	526,681	7
Maryland...........	7,271,458	109	7,315,901	112	7,601,437	106
Massachusetts......	1,420,786	21	1,585,782	22	1,485,259	21
Michigan...........	1,578,600	24	1,761,922	24	1,650,235	23
Minnesota..........	2,150,440	32	2,300,170	33	2,248,024	31
Mississippi........	3,669,495	55	4,095,633	56	3,836,012	53
Missouri...........	2,105,343	32	2,320,835	32	2,200,880	31
Montana............	2,223,284	33	2,481,473	34	2,324,174	32
Nebraska...........	1,541,518	23	1,720,534	24	1,611,470	22
Nevada.............	1,465,479	22	1,635,665	23	1,531,980	21
New Hampshire......	217,209	3	242,433	3	227,065	3
New Jersey.........	379,430	6	423,493	6	396,648	6
New Mexico.........	2,299,652	34	2,566,710	35	2,404,007	34
New York...........	1,804,331	27	2,013,867	28	1,886,209	26
North Carolina.....	5,963,784	89	6,356,357	92	6,234,412	87
North Dakota.......	2,264,856	34	2,527,534	35	2,367,314	33
Ohio...............	1,207,971	18	1,348,253	19	1,262,787	18
Oklahoma...........	4,965,780	74	5,142,454	76	5,191,120	72
Oregon.............	1,609,833	24	1,796,782	25	1,682,885	23
Pennsylvania.......	1,151,465	16	1,226,104	17	1,148,382	16
Rhode Island.......	129,501	2	144,540	2	135,377	2
South Carolina.....	3,780,129	57	4,219,114	58	3,951,666	55
South Dakota.......	1,629,882	24	1,819,160	25	1,703,844	24
Tennessee..........	3,183,387	48	3,553,073	49	3,327,844	46
Texas..............	27,354,003	406	38,446,902	421	28,516,885	398
Utah...............	2,510,565	38	2,802,116	39	2,624,491	37
Vermont............	195,306	3	218,657	3	204,796	3
Virginia...........	546,555	8	610,026	8	571,357	8
Washington.........	1,326,338	20	1,480,365	20	1,386,525	19
Washington D.C.....	1,846,652	28	2,061,103	28	1,930,450	27
West Virginia......	559,116	8	624,046	9	584,488	8
Wisconsin..........	1,515,127	23	1,691,078	23	1,583,882	22
Wyoming............	1,756,052	26	1,959,982	27	1,835,739	26
Puerto Rico........	3,997,268	60	4,461,471	62	4,178,660	58
Total, Available or Estimate.1/...	152,396,587	2,276	163,599,000	2,340	158,969,000	2,217

1/ Includes $328,237 in contingency fund and $6,200,000 for boll weevil emergency Commodity Credit Corporation transfer obligations for FY 1989. Obligations for contingency releases are not included in 1990 and 1991.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 Actual and Estimated, 1990 and 1991
Animal Care

	1989		1990		1991	
	Amount	Staff-years	Amount	Staff-years	Amount	Staff-years
Alabama............	28,311	1	36,406	1	43,207	1
Alaska.............	17,870	0	22,979	0	27,272	1
Arizona............	10,447	0	13,435	0	15,944	0
Arkansas...........	214,768	6	276,177	6	327,768	6
California.........	283,461	7	364,511	8	432,603	8
Colorado...........	67,117	2	86,308	2	102,431	2
Connecticut........	14,141	0	18,184	0	21,581	0
Delaware...........	5,206	0	6,695	0	7,945	0
Florida............	9,013	0	11,591	0	13,756	0
Georgia............	323,404	8	415,875	9	493,562	9
Hawaii.............	69,299	2	89,114	2	105,761	2
Idaho..............	41,438	1	53,287	1	63,241	1
Illinois...........	3,377	0	4,343	0	5,154	0
Indiana............	205,179	5	263,846	6	313,133	6
Iowa...............	141,129	4	181,482	4	215,383	4
Kansas.............	152,825	4	196,523	4	233,234	4
Kentucky...........	164,496	4	211,531	4	251,046	5
Louisiana..........	57,590	1	74,057	2	87,891	2
Maine..............	40,911	1	52,608	1	62,435	1
Maryland...........	5,839	0	7,509	0	8,912	0
Massachusetts......	1,015,597	28	1,305,987	27	1,549,950	31
Michigan...........	61,383	2	78,935	2	93,680	2
Minnesota..........	63,582	2	81,762	2	97,036	2
Mississippi........	124,896	3	160,607	3	190,609	4
Missouri...........	18,203	0	23,407	0	27,780	1
Montana............	306,520	8	394,164	8	467,795	9
Nebraska...........	25,890	1	33,293	1	39,512	1
Nevada.............	164,838	4	211,970	4	251,567	5
New Hampshire......	26,805	1	34,469	1	40,908	1
New Jersey.........	7,176	0	9,228	0	10,952	0
New Mexico.........	92,620	2	119,103	2	141,352	3
New York...........	22,935	1	29,493	1	35,003	1
North Carolina.....	224,357	6	288,508	6	342,402	7
North Dakota.......	37,753	1	48,548	1	57,617	1
Ohio...............	37,147	1	47,768	1	56,691	1
Oklahoma...........	131,754	3	169,427	4	201,076	4
Oregon.............	396,864	11	510,339	11	605,672	13
Pennsylvania.......	100,456	3	129,180	3	153,311	3
Rhode Island.......	246,096	6	316,463	7	375,579	7
South Carolina.....	6,332	0	8,142	0	9,663	0
South Dakota.......	11,714	0	15,063	0	17,877	0
Tennessee..........	70,846	2	91,103	2	108,121	2
Texas..............	115,360	3	148,345	3	176,056	3
Utah...............	384,659	10	494,645	10	587,046	11
Vermont............	7,317	0	9,409	0	11,166	0
Virginia...........	5,065	0	6,514	0	7,731	0
Washington.........	97,791	3	125,752	3	149,243	3
Washington D.C.....	66,429	2	85,423	2	101,380	2
West Virginia......	6,633	0	8,530	0	10,124	0
Wisconsin..........	143,064	4	183,970	4	218,336	4
Wyoming............	7,282	0	9,364	0	11,113	0
Puerto Rico........	44,818	1	57,628	1	68,393	1
Total, Available or Estimate......	5,928,003	154	7,623,000	159	9,047,000	174

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 Actual and Estimated, 1990 and 1991
Scientific And Technical Services

	1989		1990		1991	
	Amount	Staff-years	Amount	Staff-years	Amount	Staff-years
California	84,546	1	84,122	1	98,742	1
Colorado	7,637,684	124	7,599,443	124	8,920,109	127
Iowa	15,507,611	253	15,430,245	253	18,105,040	257
Maryland	4,749,764	77	4,725,423	77	5,553,370	79
Massachusetts	1,139,853	19	1,134,146	19	1,331,243	19
Michigan	3,468	0	3,450	0	4,050	0
Mississippi	1,145,186	19	1,139,453	19	1,337,472	19
Montana	5,128	0	5,103	0	5,990	0
New Jersey	661,894	11	658,580	11	773,031	11
New York	4,729,343	77	4,705,944	77	5,517,021	78
North Carolina	974,585	16	969,706	16	1,138,226	16
Texas	947,582	15	942,838	15	1,113,432	17
Washington D.C.	156,930	3	156,144	3	183,279	3
Wisconsin	3,420	0	3,403	0	3,995	0
Total, Available or Estimate	37,746,994	615	37,558,000	615	44,085,000	627

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

SALARIES AND EXPENSES

STATUS OF PROGRAM

PEST AND DISEASE EXCLUSION

Current Activities: The Animal and Plant Health Inspection Services (APHIS) conducts agricultural inspections and international pest and disease programs to keep exotic plant and animal pests and diseases from entering the United States. International travel increases by approximately 1 million people each year. International trade has increased, including both the volume of traditional agricultural items and the addition of new items to the realm of agricultural exports. This accelerating international activity increases the risk of spreading pests and diseases. Each person, bag, and import or export commodity could carry a pest or disease capable of causing a major outbreak. In recent years, APHIS has monitored more transiting items than ever before, and made more progress in international control and eradication programs. Specific program efforts through which the Agency defends U.S. agriculture from pest and disease introductions are:

Inspection of transiting items along U.S. borders and at ports-of-entry. Although the Agency still performs manual inspections, efforts have been directed at finding and using alternative inspection methods and technologies. Each year, more inspections are performed using X-ray systems and detector dogs. The use of new technologies appears to be improving the overall efficiency and effectiveness of inspections. The Agricultural Research Service (ARS) is now formally evaluating the use of X-ray systems for baggage inspection. The results of this study will serve as a basis for further decisions concerning the future use of X-ray systems.

Inspection of imported and exported animals. The Agency ensures that all exported livestock, live poultry, hatching eggs, bovine semen, bovine embryos, and plants have been inspected and certified free from contagious diseases. Exports must also be in compliance with U.S. Department of Agriculture (USDA) health agreements with importing countries. The Agency routinely meets with international agricultural health officials to facilitate international trade by clarifying and amending import requirements as necessary.

Eradication and control of pests and diseases in foreign countries. Efforts are designed to combat pests and disease in foreign countries thus reducing their threat to the United States. The Agency works with international agricultural groups to keep Panama free of foot-and-mouth disease, eradicate Mediterranean fruit flies (Medfly) from Guatemala, and prevent Mexican fruit flies (Mexfly) from infesting Northwestern Mexico.

Selected Examples of Recent Progress:

1. Africanized Bee

In cooperation with Mexico, APHIS continued to try to retard the northward migration of the bee, and to dilute the Africanized gene pool so that when the bees reach the U.S. they will be more docile and easier to manage. The Agency used a number of complimentary control strategies, including pheromone baited swarm traps, requeening and increased use of drone foundations in managed hives, investigation of reported swarm sightings, and feral hive destruction. Since the cooperation of local beekeepers is vital to the success of the program, the Agency met with them frequently and helped them to improve basic beekeeping techniques.

In the summer of 1989, it was determined that the Africanized Honeybee (AHB) would most likely arrive in the United States during Fiscal Year (FY) 1991. Therefore, scientists and APHIS personnel began to develop and test technologies and strategies to mitigate the impact of AHB when it becomes established in the United States.

2. Agricultural Quarantine Inspection

In FY 1989, 34 million passengers arrived at U.S. ports, an increase of 1 million people. APHIS continued to work with the U.S. Customs Service to expedite the clearance of passengers while maintaining adequate protection for American agriculture. In FY 1989, the Agency continued to increase the number of Agricultural Quarantine Inspection officers to meet the increased workload.

APHIS continued to use specially trained dogs to detect prohibited items at international airports. In FY 1989, the detector dog program was expanded to 12 teams operating at 8 airports. An in-house detector dog team training program was developed in FY 1988. This year, the training program produced six new teams for new locations or as replacements. The Agency will continue to conduct in-house detector dog training as it is more successful and less expensive than outside training.

In FY 1989, two additional airports received X-ray systems. There are now 13 international airports with X-ray capability. We have found X-ray technology useful at the San Ysidro, California, border station. A unit is currently in use at the station to screen pedestrian baggage.

APHIS continued to utilize its civil penalty authority. In FY 1988, regulations were issued requiring carriers to give adequate notice of intended arrival at United States ports. In FY 1989, 106 penalties, amounting to $26,500 in fines, were issued to carriers for not adhering to this regulation. The Agency issued 12,573 citations in FY 1989 accounting for fines of $384,647 for passenger baggage violations, and 492 penalties for $81,952 in fines for maritime violations.

APHIS continued the manual inspection of cargo and carriers entering the United States. In FY 1989, the Agency inspected approximately 54,000 ships and conducted almost 1.1 million inspections of regulated and miscellaneous cargoes. This year, the program worked with the U.S. Customs Service to use the available Automated Commercial System (ACS) information to produce program reports so that staff resources can be better utilized. The ACS will communicate timely information to ports-of-entry, concerning ship cargoes that are most likely to introduce exotic pests.

The Agency began the Intensified Commercial Enforcement project in FY 1988 because of concern about the amount of staffing and scope of inspections provided along the Canadian border. As a follow up to the project, we have increased the coverage at selected Canadian Border ports in Buffalo, New York; Detroit, Michigan; and Blaine, Washington. Modified forms of this project will be implemented in the future upon the request of the regional directors. The Canadian border ports are operating smoothly as a result of this increased coverage.

In FY 1989, APHIS and Purdue University developed and evaluated an initial pilot system called the Export Certification Project (EXCERPT). EXCERPT, a computerized system of information, lists the requirements to export agricultural commodities. The Agency canvassed selected users throughout the country, using both questionnaires and personal interviews. APHIS and State representatives formed an advisory committee to review the User

Requirement Document, which was compiled from the interviews and questionnaires. Purdue University is now reviewing this document to better understand the user's needs and will provide comment to the committee.

3. Foot-and-Mouth Disease

Panama

In FY 1989, the Panama-U.S Commission for the Prevention of Foot-and-Mouth Disease (FMD) carried out nine vesicular disease investigations, four of which were positive for vesicular stomatitis, none were positive for FMD.

This is significant because it keeps with APHIS' goal of keeping FMD out of Panama. Seventeen meetings, courses, and outbreak simulations were carried out. APHIS continued to support the Vesicular Disease Diagnostic Laboratory in Panama City, Panama which provides diagnostic services for vesicular disease in Panama and Central America. During FY 1989, this laboratory processed biological specimens from 259 vesicular disease investigations.

Colombia

In Colombia, APHIS provided financial assistance to the Colombian Agricultural Institute (ICA)-USDA cooperative FMD program. During FY 1989, Colombian field personnel conducted 78 vesicular disease investigations, of which 27 percent were positive for FMD, and 42 percent were positive for vesicular stomatitis.

We continue to maintain Area 1 in an FMD-free status. However, there was an isolated outbreak in Colombia, 80 miles from the Panama border, which was quickly detected and brought under control. The outbreak was caused by unchecked movement of cattle from outside Area 2. In Area 4, APHIS maintains surveillance and control posts to regulate the movement of animals and animal products both into and within the area. The program conducted farm and animal surveillance activities, supervised the FMD vaccination of bovines on a regular basis, and conducted public information and education programs.

In the program's six areas, ICA-USDA program personnel held 2,143 meetings, courses, and presentations.

Mexico

The Mexican and Central American FMD prevention programs are cooperative efforts aimed at preventing and rapidly detecting the entrance of FMD and other exotic animal diseases into those countries and subsequently the United States. Upon detecting exotic animal diseases all available resources are mobilized to eradicate the diseases as quickly as possible. The Mexico-U.S. FMD/Exotic Disease Commission is responsible for the prevention of all exotic diseases and tested and processed the following at the Commission's high containment laboratory in Mexico City:

No. of Exotic Disease Investigations	Results
105 FMD	15 Vesicular Stomatitis No FMD
18 Equine	No African horse sickness No Venezuelan equine encephalomyelitis
12 African swine fever (ASF)	9 Hog cholera
10,500 viral hemorrhagic disease (VHD)	2,293 VHD
27 Cattle investigations	No exotic disease

APHIS carried out 259 FMD investigations during FY 1989 as part of the FMD prevention programs with Belize, Guatemala, Honduras, El Salvador, Nicaragua, and Costa Rica. Of these none were positive for FMD but 137 were positive for vesicular stomatitis, a disease indistinguishable from FMD in the field.

The Commission took the lead in the detection and eradication of an outbreak of an exotic disease of the domestic rabbit population in Mexico in FY 1989. The Commission and support personnel carried out more than 10,000 disease investigations of which 2,293 were positive. The Commission high containment laboratory in Mexico City processed all of the above samples.

4. Import/Export Inspection

Export Animals

During FY 1989, the Agency conducted negotiations with Argentina, Columbia, Taiwan, Switzerland, Brazil, India, and Mexico. Most of the negotiations resulted in amendments in the import requirements of other countries for U.S. animals, semen, embryos, and increased opportunities for export.

The first direct shipment of cattle from the United States to mainland Australia without prior quarantine in either Cocos Island or Canada occurred in FY 1989. Also, the first shipments of swine semen to Japan and cattle (1 bull) to the Soviet Union took place.

The following table summarizes livestock, poultry, swine, and related genetic material estimated exports for the period October 1, 1988, through September 30, 1989:

	Total
Cattle	278,576
Horses	37,213
Sheep	342,706
Swine	169,202
Total	827,697
Baby Chicks (Breeding)	21,654,642
Baby Chicks (Not Breeding)	14,854,270
Turkey Poults	2,640,489
Other Day-old Poultry	138,882
Live Poultry (Not Day-old)	4,147,357
Total, Live Poultry	43,435,640
Hatching Eggs (Dozen)	24,443,476
Hatching Eggs (Value $)	45,643,034
Bovine Semen (Value $)	48,199,600
Bovine Embryos (Value $)	10,584,274
Total, Germ Plasm	104,426,908

Import Animals

A shipment of 140 Chinese swine successfully completed a 120-day quarantine at the Harry S. Truman Animal Import Center. The Agricultural Research Service imported the swine in cooperation with Iowa State University and the University of Illinois for research purposes. In addition, a total of 79,484 wether lambs qualified for importation from New Zealand, having underwent quarantine at a USDA-supervised private facility at Portland, Oregon.

As a result of several outbreaks of exotic ticks found on imported ostriches in FY 1989, all ratites (ostriches, rheas, emus, and cassowaries) were banned from importation effective August 21, 1989. The ban will remain in effect until methods and regulations can be prepared to permit safe, uninfested entry into the United States.

The following table provides data on import inspections of livestock, birds, and poultry for the period October 1, 1988, through September 30, 1989, and estimates for FY 1990:

	FY 1989	FY 1990 (est.)
Cattle:		
Canadian Ports	511,118	600,000
Air & Ocean Ports	38	40
Mexican Ports	615,087	800,000
Total, Cattle	1,126,243	1,400,040
Swine:		
Canadian Ports	1,008,327	1,100,000
Air & Ocean Ports	178	500
Total, Swine	1,008,505	1,100,500
Horses	34,421	35,000
Sheep	113,[illegible]98	200,000
Goats	1,[illegible]78	2,000
Total, Livestock	2,283,895	2,737,540
Other	6,669	7,000
Offered for importation:		
Commercial birds	368,098	400,000
Poultry	6,976,997	7,000,000
Hatching eggs	22,321,412	23,000,000

"Other" includes miscellaneous non-poultry birds (the bulk of the figure), and miscellaneous ruminants and exotic animals that do not fit in any category.

5. International Programs

Foreign Disease and Pest Exclusion

APHIS conducted preclearance inspections of fruits, vegetables, and a limited amount of propagative material in 17 countries around the world. Preclearance inspections take action against serious plant pests at their source, thus preventing such pests from arriving on our shores. APHIS veterinarians worked in Italy, the Philippines, the Dominican Republic, Kenya, and Haiti to promote U.S. livestock health and encourage acceptance of U.S. animals and animal products in foreign markets.

Pest exclusion activities conducted in FY 1989 include the operation of a number of preclearance programs for foreign agricultural commodities such as Netherlands bulbs; Japanese and Korean Sandpears; fruits and vegetables from Jamaica, the Dominican Republic, Mexico and Chile. They also include preclearance of U.S. military personnel, equipment, and baggage returning from overseas posts.

Export Facilitation

APHIS was active in export facilitation in FY 1989 both at home and abroad. Bilateral talks were conducted with Japan and Australia to expand markets for U.S. agricultural products in those countries. Negotiations were continued with foreign plant health officials to gain or expand markets for hay, lumber, apples, limes, citrus, peanuts and grapes to countries that currently prohibit these products for phytosanitary reasons.

Technical Information Exchange

In FY 1989, APHIS continued to develop preclearance programs to ensure that foreign agricultural products destined for the U.S. do not present a risk to U.S. agriculture. The Agency provided technical assistance through cooperative programs designed to control pests of imminent concern to the U.S. and to foreign plant protection and quarantine organizations. Prime examples of this effort include: fruit fly surveys in the Caribbean, Latin America, the Philippines and other regions of the world; food crop protection in Guinea Bissau; and control of locusts in Africa.

6. Mediterranean Fruit Fly

APHIS conducted a cooperative trapping program in Puerto Rico, the U.S. Virgin Islands, and the States of Arizona, California, Florida, Louisiana, Texas, Nevada, and New Mexico, to quickly detect Medfly infestations. If an infestation is found, APHIS and the affected States initiate a program to eradicate the outbreak. APHIS and California State and county inspectors have found that a portion of Los Angeles County, Santa Clara County, and San Bernardino County, California, are infested with the Medfly. Specifically, as of the end of October 1989, a total of 132 Medfly adults, 102 Medfly larvae and 1 mated female Medfly with well developed eggs had been found within a total of 331 square miles of portions of the cited counties. The quarantined parts of each county are as follows: Elysian Park, Los Angeles County; Mountain View, Santa Clara County; Valinda/Whittier, Los Angeles Country; and Alta Loma, San Bernadino County. Eradication efforts consisting of pesticide/bait spray applications and regulatory activities were begun in July 1989, and expected to last until June 1990.

The Moscamed program seeks to eradicate the Medfly from Guatemala by moving the barrier progressively southward from its current location about 31 miles inside Guatemala from the Mexico border. This year, the Agency continued to produce sterile flies at rearing facilities in Mexico and Guatemala, release sterile flies, apply bait spray applications selectively, enforce quarantine regulations, and conduct extensive pre-and post-eradication surveys. The sterile fly rearing facility in Mexico, produced an average of 450 million flies per week. The facility in Guatemala produced over 200 million flies per week during FY 1989, which is double the FY 1988 production.

7. Mexican Fruit Fly

The Mexfly, an insect pest of more than 40 species of fruit, occurs in the United States primarily in the Lower Rio Grande Valley in southern Texas. APHIS carried out a Mexfly program in this area to prevent this pest from becoming established in other citrus growing areas of the United States. As part of its program, the Agency dispersed sterile flies, applied bait, and treated fruit when necessary. APHIS produced over 1.5 billion sterile flies in FY 1989 at the modern sterile fly rearing facility in Mission, Texas. During the 1988-1989 citrus season, approximately 121 Mexflies were detected in the lower Rio Grande Valley, less than the number detected during 1987-1988. In some cases, methyl bromide fumigation was required before Mexfly host materials could be shipped to other citrus growing States.

In addition to the program conducted in Texas, the Agency conducts trapping in Arizona, California, Florida, Louisiana, and New Mexico. During 1989, four Mexfly adults were found in Los Angeles County, California. Intensive trapping was initiated and will continue through three Mexfly life cycles.

8. Screwworm

During FY 1989, the Joint U.S.-Mexico Commission continued eradication activities for Screwworm in the Yucatan peninsula, in Guatemala and in Belize. Currently one third of Guatemala, one half of Belize and affected areas of the Yucatan are being treated with sterile insects. In expectation of a successful effort in both Guatemala and Belize, the Commission began negotiations with Honduras. P.L. 480 funds will be available in 1990 if approval for the program is obtained from the Honduran Congress. Since the eradication of Honduras would not be cost effective geographically without the inclusion of El Salvador, negotiations with El Salvador are currently underway.

Currently, "self-sustaining" cases of screwworm, screwworms which are able to maintain themselves without further introduction, are only reported from Belize, Guatemala and the Mexico-Belize-Guatemala border area in Mexico.

PLANT AND ANIMAL HEALTH MONITORING

Current activities: Monitors animal and plant health to detect and react to exotic pests and disease introductions. The Agency creates and updates endemic pest and disease information bases and monitors and carries out surveys in cooperation with States and industry. The Agency also surveys for exotic plant pests and investigates reports of suspicious animal pests and diseases. Early detection reduces their spread, helps eliminate significant losses, and helps maintain pest-free status for export certification of agricultural commodities. U.S. agriculture is currently free from hundreds of foreign pest and diseases. Survey data is essential for initiating action programs and results in better pest and disease management.

APHIS works with the States to compile two databases: the National Agricultural Pest Information System (NAPIS) and the National Animal Health Monitoring System (NAHMS). States enter the results of plant pest surveys directly into the NAPIS database, which includes crop hosts, location, weather conditions, pest life stages, crop damage, survey and control methods used on certain pests, and trapping methods. Descriptive data about the occurrence and costs of animal health events are collected from a statistically valid sample of producers for the NAHMS database. NAHMS reports can be used by producers to improve health and production efficiency of livestock and poultry.

The Agency maintains a cadre of trained professionals, prepared to respond immediately to potential animal and plant health emergencies. Reports of suspected exotic pests and diseases are investigated and emergency action is taken if necessary. The Agency develops pathway studies and thoroughly investigates the progression of outbreaks to determine the origin of plant and animal pests and diseases.

Selected Examples of Recent Progress:

1. Animal Disease Detection

Foreign Animal Disease Surveillance

Foreign Animal Disease Diagnosticians (FADD) investigated 220 reports of suspected foreign animal disease conditions in the United States and Puerto Rico during FY 1989. The investigations included: 117 for suspected vesicular conditions, 47 for poultry diseases, 3 for mucosal conditions, 12 for encephalitic conditions, 7 for swine septicemic conditions, and 34 for screwworms or other conditions.

There were 4 cases of exotic Newcastle disease involving pet birds that were diagnosed and eliminated; one in California and Texas and two in Connecticut. There was no spread to, or involvement with commercial or domestic poultry.

Live bird markets were surveyed in the New York City area and in New Jersey for highly pathogenic Avian Influenza (AI). Samples were collected from 73 markets with no evidence or isolation of the AI virus. Samples collected from Florida and Virginia were found to be serologically-positive for non-pathogenic AI. All serologically-positive poultry were destroyed and no AI virus was isolated from any of the flocks.

Exotic ticks were discovered on a shipment of imported ostriches from Zimbabwe. All ostriches and premises were quarantined, treated, and placed under surveillance. Exotic African ticks were also found on one of 10 rhinoceros imported into Texas. All rhinoceros were treated twice before being released from quarantine.

Screwworm larvae were found in the wound of a horse that had returned to Puerto Rico from competition in Venezuela. The horse and exposed grounds were effectively treated. To prevent the re-establishment of the screwworm fly in Puerto Rico, a task force was organized to coordinate sterile fly dispersal and surveillance programs.

APHIS conducted a training course on Military Support for Emergency Animal Diseases, a Regional FADD Seminar, a Wildlife Disease Seminar for FADD's in cooperation with the Southeastern Cooperative Wildlife Disease Study, and a FAD Training Course for State university and laboratory diagnosticians. All courses are again scheduled for FY 1990. There was no FADD Training Course held in FY 1989; however, two training courses are scheduled for FY 1990.

All four Regional Emergency Animal Disease Eradication Organizations, (READEO), were fully staffed and maintained during FY 1989. A READEO training exercise was conducted in the Western Regional Office in January 1989. The exercise used a new version of the Recorded Emergency Animal Disease Information System, (READI) reprogrammed utilizing Oracle software which improved data entry and retrieval time by as much as 300 percent.

During FY 1989, four editions of the FAD REPORT were published and distributed. The FAD REPORT is disseminated nationally and internationally to over 6,700 readers each quarter. The report provides updates of current foreign animal disease information from the Veterinary Services Data Bank, a computer and microfilm-based information system of technical and scientific literature on domestic and foreign animal diseases. The Data Bank answered 235 requests for disease information in FY 1989.

NAHMS

In FY 1989, Alabama joined Maryland, Virginia, Wisconsin, Illinois, Oregon, Tennessee, Georgia, Ohio, Michigan, Iowa, Colorado, and California to become the 13th State involved in the NAHMS program. Six additional States, Nebraska, Minnesota, Indiana, Pennsylvania, New York, and North Carolina are scheduled to join in FY 1990. NAHMS coordinators were identified and trained for all of these new States.

A total of 500 herds and flocks were involved in the program in FY 1989. A national swine health survey was field tested in Virginia, Maryland, Oregon, Georgia, Wisconsin, Illinois, Tennessee, Colorado, and Alabama Data were collected on death and illness among sows and baby pigs during the farrowing period. Pilot projects examining dairy cattle health were completed in Ohio and Michigan. A pilot project examining beef health was completed in Colorado. A pilot project examining swine, sheep, and beef cattle was completed in Iowa. A pilot project examining dairy cattle, beef cattle, and turkeys in California will be completed in the first quarter of FY 1990. Eleven new reports of NAHMS pilot projects and field tests were completed. The program entered into cooperative agreements with University of California-Davis, Colorado State University, Iowa State University, Ohio State University, Michigan State University, and North Carolina State University for further analysis of biological and environmental samples.

Field tests of the National Swine Survey established preweaning death losses averaging 12 to 20 percent of baby pigs born alive. The most frequent cause of death was crushing by the sows. Diarrhea was the most frequently identified illness in animal health which adversely affect production efficiency and farm profitability. The National Swine Survey will seek to establish specific management and environmental factors which are associated with illness and death in baby pigs so that improvements can be made.

2. Pest Detection

In FY 1989, APHIS provided each State cooperator $26,000 to $32,000, depending on the extent of participation in the program. In FY 1989, each State actively participated in the program and organized a pest survey committee. APHIS developed a data quality assurance policy for NAPIS which will modify data management and verification procedures. This year, computer generated maps were produced on a number of pests including the grasshopper and gypsy moth.

In FY 1989, APHIS collected data from field surveys for new infestations of citrus canker, Varroa mite, various fruit flies, honey bee tracheal mite, and bacterial leaf blight of rice. Surveys to determine the level of endemic pests included: nematodes, black cutworm, corn earworm, potato leafhopper, Russian wheat aphid (RWA), and tomato spotted wilt virus. In FY 1989, an improved approach to placement of traps was developed. A formula was developed which will enable the program to place traps in each state in locations that will provide statistically valid data.

PEST AND DISEASE MANAGEMENT PROGRAMS

Current Activities: In cooperation with the States, APHIS works to improve the general health of our Nation's agriculture through management techniques designed to eradicate harmful pests and diseases, or, if eradication is not feasible, minimize their economic impact. Endemic diseases and pests are monitored through surveys to detect their location, and through inspections aimed at preventing their spread into noninfested parts of the country. Regulatory enforcement, research, and eradication are control tools. Specific program efforts include:

Plant Pests and Diseases: APHIS Plant Protection and Quarantine unit coordinates a number of programs which actively control or eradicate plant pests. Various tools are used, including pesticides, traps, and natural predators in order to control boll weevil, grasshoppers, gypsy moths, noxious weeds, and witchweed.

In order to prevent the spread of plant pests into noninfested areas, APHIS develops and enforces regulations concerning the movement and quarantine of plant materials. Extensive research and methods development are conducted to determine the most feasible and environmentally sound methods of dealing with golden nematode, imported fire ant, pink bollworm, and other pests for which there is no viable control method.

Animal Pests and Diseases: The Veterinary Services unit of APHIS implements disease control and eradication programs involving testing, quarantine, treatment, and depopulation of infected animals. Brucellosis, cattle ticks, poultry diseases, pseudorabies, and tuberculosis are program examples. The Animal Damage Control program protects American agriculture from detrimental predators through identification, demonstration, and application of the most appropriate methods of control.

Regulatory enforcement activities prevent the spread of communicable animal pests and diseases in interstate trade. These activities include inspection, surveillance, animal identification, and prosecution. Animal health compliance and enforcement, national poultry improvement plan, and swine health protection are programs of this nature.

Selected Examples of Recent Progress:

1. Animal Damage Control (ADC) Operations

Protecting American Agricultural Resources. In response to increasing wildlife damage, ADC expanded: beaver damage control efforts in Wisconsin, Oklahoma, Texas, New Mexico, and Mississippi; abatement of squirrel damage to maple sugar pipelines in Vermont; the guarding dog program to protect livestock from wolf predation in Minnesota, and from coyote predation in Oregon, Washington, Wyoming, Montana, and Idaho; migratory bird damage control to aquaculture in the Delta States; grackle control aimed at minimizing damage to the citrus industry in the Rio Grande Valley of Texas; and migratory bird damage to field crops nationwide.

Bear and mountain lion loss/damage complaints increased significantly. The capture of depredating mountain lions increased by 32 percent in FY 1989. Drought conditions over the past several years have reduced natural foods for bear and lions causing them to leave their natural habitat and seek other food sources.

In North Dakota and South Dakota, APHIS conducted aerial blackbird hazing operations to assist farmers in protecting sunflower crops. The program implemented new aerial hunting standards to increase safety and efficiency during these operations. In North Dakota, ADC responded to 598 requests for assistance in blackbird damage cases. That figure is down 23 percent from FY 1988.

Protecting Human Health and Safety. In FY 1989, APHIS increased control activities and damage assessments at airports, and established service agreements with local airport authorities. A training workshop was held to inform the Federal Aviation Administration on procedures to prevent aircraft strikes with birds. APHIS controlled local skunk populations in Wyoming to stop the spread of rabies. Blood samples were collected from predators in several western States to help the Center for Disease Control monitor plague.

Protecting Natural Resources. ADC responded to requests to protect endangered desert tortoises from coyotes and ravens in Utah and California and, the program provided assistance to control avian and mammalian predators on the Malheur Wildlife Refuge in Oregon to protect nesting sandhill cranes.

2. Animal Health Compliance and Enforcement

In FY 1989, an estimated 18,250 inspections were conducted at livestock markets and other concentration points, 5,000 inspections were conducted at slaughter establishments, and approximately 12 million cattle were tested for disease surveillance. Interstate movement of swine is now also closely monitored due to implementation of recently issued swine regulations which require that all swine moving in interstate commerce, be identified with eartags, backtags, or tattoos.

As part of the reorganization of APHIS which took effect October 1, 1988, the regulatory enforcement portion of the animal health compliance and enforcement (AHCE) program was transferred from the Veterinary Services organization within APHIS into a newly created Regulatory Enforcement and Animal Care (REAC) unit. The move is designed to yield greater consistency and speed in processing violation cases, improving relationships with the Department's Office of Inspector General, and strengthening internal controls.

During FY 1989, REAC investigators documented and reported to headquarters, a total of 820 violation cases involving regulated livestock. The number of cases resolved totaled 460. While this represents somewhat of a decrease from FY 1988, this is largely attributable to reorganizational adjustments and expanded responsibilities of the Regulatory Enforcement (RE) staff. This situation has now stabilized as the staff has become more familiar with the new structure.

With continued progress towards eradication in the Brucellosis program, APHIS anticipates an increased need for enforcement vigilance. Accordingly, the program recently installed a new computer system which will give each RE investigator immediate access to an extensive database of previously unattainable program violation history. This new system, called the Compliance Investigation Tracking System (CITS), allows for data entry, retrieval, and updating from sites all over the nation. Also, the permanent shut-down of the Brucellosis Information System (BIS) in 1989, which employed the Laboratory Operations Support Subsystem (LOSS), including bar code readers and voice recognition systems, was accomplished through implementation of a new microcomputer system with which the LOSS equipment can be used, known as the Brucellosis Recording and Reporting System.

3. Biological Control

APHIS views the development of biological control agents for the control of agricultural pests as essential to ensuring the future productivity and competitiveness of U.S. agriculture. Laboratory and field activities include collection and screening of potential biological control organisms, rearing and distribution of selected organisms, and program evaluation. To accomplish this, three biological control laboratories are maintained at locations in Mission, Texas; Niles, Michigan; and Bozeman, Montana.

Selected examples of ongoing projects include:

Alfalfa Weevil

Activities in FY 1989 consisted of a parasite recovery survey, an evaluation study, and parasite field rearing site (insectary) monitoring. The Federally run portion of the alfalfa weevil program is scheduled to be completed in FY 1990. At that time, alfalfa weevil predators will be established in many parts of the country, parasite rearing technology will have been developed and tested, and training will have been completed. Growers and State cooperators will be able to use APHIS developed parasite rearing techniques to increase the numbers of alfalfa weevil parasites in the environment, and to introduce these parasites to new sites.

Aphid Biological Control (ABC)

At present, 12 species and 22 geographic strains of RWA natural enemies are being reared at APHIS Biological Control laboratories. APHIS has been instrumental in strengthening foreign exploration efforts for additional biological control agents for RWA. With cooperator assistance, nearly 70,000 parasites and 460,000 predators have been released into RWA infested States over the last 2 years.

Colorado Potato Beetle

Recent studies indicate that varieties of *Bacillus thuringiensis* (Bt) are effective in controlling Colorado potato beetles in their larval stages. In FY 1989, APHIS produced 110,000 egg parasites of the beetle for distribution to researchers and cooperators in the Northeast.

Diffuse and Spotted Knapweed

In FY 1989, APHIS distributed almost 6 million seed head flies in the Northwest. Research has shown that seed head flies are effective in helping control the spread of knapweed.

Leafy Spurge

In FY 1989, the Agency devoted $1 million toward biological control of leafy spurge. This program, now in its second year and centered out of the Bozeman, Montana, facility, is working towards the establishment of domestic field insectary sites for six newly introduced species of beneficial organisms. APHIS personnel at Albany, California, and Mission, Texas, screen and rear recently approved natural enemies brought from Europe. These include natural enemies such as flea beetles, a gall midge, a stem boring beetle, and a root gall fly.

4. Boll Weevil

High Plains Control Program

The High plains cooperative control program treated only about 350,000 acres in 1989, down from 615,000 acres treated in 1988. A major reason for the decrease in treated acres is that dry weather reduced the number of acres planted, and forced many farmers to plow down their cotton. The number of weevils detected in the last 3 years were:

	1987	1988	1989
Boll weevils trapped	8,304	12,314	8,022

In 1989, the program detected boll weevils in the Upper Rio Grande Valley areas of Texas and Mexico, and treated several fields in Bosque Bonito, Mexico. The Agency recommends and encourages cotton farmers to practice voluntary stalk destruction and plowdowns to prevent overwintering of boll weevil in cotton stubble. Boll weevil populations along the Texas border will continue to be monitored in order to assess the effectiveness of the program.

Southeast Eradication Program

During the 1989 cotton growing season, the treatment zone covered 374,000 acres; 108,000 acres less than in 1988. The 1988-1989 winter was mild enough to allow numerous weevils to survive and emerge in the spring. Moreover, the reduced cotton acreage concentrated the surviving boll weevils in fewer acres. Nearly all of these cotton fields in the expansion area required pesticide applications. Frequent spring rain prevented timely and effective pesticide treatments, while providing moisture for excellent cotton growth. With the abundant food supply, the boll weevil population exploded. In the States where boll weevil had not previously been eradicated, the boll weevil population exceeded a 30-year record. Nearly 45 percent of the fields were sprayed 3 to 4 times in July to achieve control.

Southwest Eradication Program

The original eradication area (parts of southern California, western Arizona, and northern Mexico near the California border) was expanded in FY 1988 to include central Arizona and northern Mexico near the Arizona border. Over 64,000 traps were in place in the expanded program in FY 1989--14,000 more than in FY 1988. Even with this increased density of traps, the number of boll weevils captured has been about 92 percent less than last year at the same time. Significantly, there have been no weevils captured in California this year. The number of acres treated in 1989 to date is only 190,000 in comparison with 946,000 acres treated in 1988. Since acreage treated is based on weevil detections, this large reduction in treated acreage is a strong indication of the success of the program to date.

5. Brucellosis Eradication

The program achieved a major milestone this past year as southern Florida, the only remaining Class C area, was elevated to Class B status on June 8, 1989. Kentucky also improved its status, becoming a Class A State. At the of FY 1990, there were 29 States including the District of Columbia and the U.S. Virgin Islands in Class Free, 18 States including Puerto Rico in Class A, and 6 States in Class B.
The number of herds under quarantine because of brucellosis continues to decrease. From September 30, 1988, to September 30, 1989, the number of quarantined herds dropped 40 percent, with substantial improvement occurring in all of the Class B States. Further progress towards eradication is illustrated by the reduction in reactor herds and individual reactor animals despite increased testing. For the entire year there were 29 percent fewer reactor herds and 23 percent fewer individual reactor animals detected in FY 1989 than the year before.

In response to a request from the National Cattlemen's Association, APHIS prepared a Rapid Completion Plan for the eradication of Brucellosis. The Plan includes funding components for core program operations plus alternative accelerated activities that focus on locating and eliminating infection. We have received favorable responses concerning the plan from the industry and Congress.

With respect to swine brucellosis, West Virginia has become the 33rd State to eradicate the disease, qualifying for validated free status for a 3-year period which began October 1, 1989. Implementation has begun on the recommendations of an APHIS-convened task force of specialists from the swine industry, universities, and regulatory agencies to increase efficiency in the swine brucellosis and pseudorabies surveillance programs. A swine brucellosis Uniform Methods and Rules of proposed program changes has been drafted and submitted for approval to the U.S. Animal Health Association's Advisory Committee on Swine Brucellosis. In addition, the National Pork Producers Council has proposed a 3-year accelerated swine brucellosis eradication program which is currently under review within APHIS.

6. Cattle Ticks

Only three cattle fever tick infestations were reported outside of the quarantine zone in FY 1989, all of which were quickly eradicated. Approval was obtained from Texas to build 108 miles of road along the Rio

Grande River to facilitate tick patrols, however, the implementation did not take place due to inability of the Army Corps of Engineers to undertake the project. Without these roads, our ability to conduct effective patrols along some portions of the Rio Grande River is seriously hampered.

Progress in the Puerto Rico program which had continued through the first three quarters of FY 1989 was nullified in the fourth quarter when Hurricane Hugo struck the island. Since most treatment cycles on the eastern side of the island were broken, eradication activities there will have to begin anew thus causing a delay in the timetable for achieving eradication. During the third quarter of FY 1989, the entire island had come under treatment, which would have dramatically reduced the possibility of tick-reinfestation in areas already declared free. During the second quarter of FY 1989, APHIS and ARS personnel conducted a cost-benefit study of the program which estimated that for the period 1983-1995 the program would generate significant benefits to the Puerto Rican beef and dairy cattle industry, including substantially increased meat supplies for Puerto Rican consumers.

7. Golden Nematode

In FY 1989, the golden nematode program found new infestations on a total of 10 acres. All new fields are within the regulated area. Since the start of the program, the golden nematode has infested 4,969 acres in New York State. The total number of regulated acres in the program is now 4,897. However, only 141 acres or 3 percent of the regulated acres are actively infested.

In FY 1989, the program released 155 acres of actively infested land from the control program after they tested negative for the pest. Growers successfully planted resistant potatoes on these fields and may now begin approved crop rotations. Two new resistant potatoes, the Steuben and the Allegheny, were released this year.

8. Grasshopper and Mormon Cricket

For the second straight year grasshopper populations have been significantly below their historical averages. This is due in part to past successes in the control program, in part to the natural cycles in grasshopper population dynamics, and in part to weather conditions. In FY 1989, APHIS treated approximately 107,000 acres, compared to 514,000 acres in FY 1988 and 1.4 million acres in FY 1987. Funding provided for grasshopper control in FY 1989 allowed a quick and timely response to grasshopper outbreaks.

The following table shows acreage treated during FY 1989:

State	Rangeland	Cropland	Total
Colorado	575	0	575
Nevada	16,979	5,570	22,549
North Dakota	0	2,496	2,496
Oregon	12,832	0	12,832
Utah	48,528	896	49,424
Wyoming	14,209	4,995	19,204
Total	93,123	13,957	107,080

FY 1989 marked the completion of the third year of the grasshopper Integrated Pest Management (IPM) project. This year the program released a second draft of computerized grasshopper management decision support ("expert system") software, and continued to evaluate the economic damage to forage plants by grasshoppers. Field testing of grasshopper baits and biological control agents was continued. Refinements of bran bait application techniques have allowed control programs to reduce the amount of bait applied per acre from 10 pounds to 1.5 pounds, and to reduce the amount of active ingredient from 10 percent to 2 percent. Methods developed by the IPM program are reported at the annual grasshopper meeting which is attended by APHIS, researchers, cooperators, and representatives of farmers' organizations. These refinements have substantially reduced control costs. Other activities included collection and evaluation of environmental samples, monitoring of climatic and grasshopper observation sites, and development of an experimental bait spreader which doubles the application swath from currently used spreaders.

9. Gypsy Moth

In FY 1989, APHIS cooperated with the States and the Forest Service (FS) in conducting eradication programs on isolated infestations on Federal and private lands. APHIS completed 32 gypsy moth eradication projects totaling 11,626 acres at a cost of $284,171. Major eradication projects were located in Utah with 1,200 acres, and North Carolina with 9,000 acres.

The following table identifies gypsy moth eradication projects completed by acreage, region, and treatment method (some acres in the Northeast Region received a combination on treatments in FY 1989):

		Methods of Treatment			
Region	Acres Eradicated	Mass Trapping	Bt	Dimilin	Other
Northeast	1,415	1,400	321	0	0
Southeast	8,503	0	8,492	11	0
South Central	9	0	9	0	0
Western	1,687	60	1,582	0	45
	11,614	1,460	10,404	11	45

The Agency and the State of Ohio surveyed 56 counties in central and western Ohio. The survey resulted in the recovery of 1,500 moths. This was a 5 fold increase over 1988's survey. In FY 1989, the State of Virginia reported reduced survey findings in their 11,000 acre infestation, and Oregon was released from quarantine.

APHIS personnel continued to inspect vehicles on interstate highways in Ohio for outdoor household articles that could carry gypsy moths into non-infested areas. The Agency also conducted an information campaign to inform the public about outdoor household article regulations and the need to control the spread of the gypsy moth.

APHIS has taken the lead in developing and evaluating new control methods for use on isolated infestations of the gypsy moth. Major initiatives included the development and field testing of the inherited sterility technique (F1 sterility program) in cooperation with the FS and Agricultural Research Service, and laboratory and field evaluation of Bt. Bt was used in 91 percent of the control activities in FY 1989. The Agency has emphasized the development of the Bt technique because it represents an environmentally acceptable alternative to chemical pesticides.

10. Imported Fire Ant

In FY 1989, APHIS continued to cooperate in the development and testing of new insecticides and treatment methods. The Agency evaluated the use of TRIUMPH as a quarantine treatment for nursery stock and grass sod, and LOGIC for the control of imported fire ant (IFA) in blueberries. Also, existing quarantine treatments are being examined to determine their effectiveness against multiple queen colonies.

APHIS held periodic meetings during the year with ARS, the Environmental Protection Agency, and industry to share information on new control products and discuss strategies which would assist these products in reaching market. Moreover, the Agency conducted an informational campaign to inform commercial truck drivers and nurserymen about IFA. Results of a comprehensive survey of susceptible States in 1988 and 1989 detected 12 isolated infestations in Arizona and 1 in California. Treatments by States were completed and eradication has been confirmed in all but one case. An infestation was discovered in Maryland in 1989. State officials are working to eradicate this infestation.

11 Miscellaneous Plant and Animal Diseases

Selected examples of recent program activity include:

Black Stem Rust (AKA Barberry)

In September 1989, APHIS published a revised Federal quarantine governing the interstate movement of susceptible varieties of barberry. Under the new regulations, movement of susceptible barberry plants through or into 16 states designated as protected areas is prohibited. In cooperation with ARS and several State Departments of Agriculture, APHIS is currently preparing a guide to aid in the identification of regulated barberry varieties.

Citrus Canker

In addition to implementing regulations to prevent the spread of citrus canker to other citrus producing states, since 1984 APHIS has cooperated with the State of Florida in conducting a citrus canker eradication program. At the present time APHIS is reviewing the most recent scientific information to determine if it is appropriate to propose removing regulations related to the nursery strain. At the same time, APHIS is increasing it's involvement in the survey and regulatory programs being conducted in the area where the Asiatic strain is present.

Japanese Beetle

APHIS regulates airports in the Eastern United States to prevent the spread of Japanese beetles to noninfested areas. In FY 1989, the Agency treated airplanes at the Columbus International Airport (Ohio), Standiford Field (Louisville, Kentucky), and Rickenbacker Air Force Base (Ohio). The State of California found 19 live Japanese Beetles on 14 aircraft coming from the east coast in FY 1989, compared to 2 in FY 1988. Preventive efforts, including mechanical barriers, are planned for use in 1990 at the Louisville, Kentucky, airport where the majority of beetles originated.

Potato Wart

Recently spores of the fungus causing the potato wart were found in Allegheny County, Maryland, an area where the disease was thought to have been eradicated. It has still not been determined if the spores found are a non-viable remnant from the previous infestation, or if they represent an active current infestation. APHIS is cooperating with the State of Maryland to evaluate methods for determining the viability of spores, and to conduct surveys to detect any active infestations that may be present.

Scrapie

APHIS published a notice in the Federal Register in November 1988 soliciting public comment on a proposal to discontinue the current scrapie eradication program. A majority of the respondents opposed discontinuing the program until an alternative is developed. Accordingly, the Agency has decided to adopt a "negotiated rulemaking procedure" to determine the program's future course. Under this process, an advisory committee of Federal, State, industry, and other stakeholder groups will meet to discuss and agree upon the best approach for the program in the future.

In FY 1989, 77 flocks were diagnosed positive for scrapie and approximately $226,000 was paid for indemnity. The Agency continued to support cooperative research between the Scrapie Investigation Center at Mission, Texas, and the International Sheep and Goat Institute at Logan, Utah, to determine whether scrapie can be transmitted via the embryo. Additionally, support was provided for cooperative research with the University of Wisconsin which seeks to develop a diagnostic test for scrapie.

Bluetongue

In FY 1989, APHIS conducted its annual bluetongue survey of 23 States to determine the incidence of bluetongue. The results indicate that the States surveyed continue to be bluetongue-free or show a low incidence of bluetongue, with no major increase or decrease of infection. Canada's Department of Agriculture continues to use the survey results to justify changes in its laws which govern the importation of livestock from the United States. Other countries also use the survey information to determine if livestock can be exported from the U.S.

Equine Diseases

APHIS continues to support Federal and private sector research aimed at developing new diagnostic tests for glanders, contagious equine metritis (CEM), equine piroplasmosis, and dourine. Data gathered from previously supported EVA studies continue to directly benefit U.S. horse exports to England, Ireland, France, Australia, and New Zealand. Test kits developed using new biotechnology techniques continue to be used in the State-Federal cooperative equine infectious anemia (EIA) program. Over 8,000 horses were tested for EIA with less than 5,000 horses testing positive for the disease. APHIS has also been actively involved with the equine industry in assessing the risk of holding the 1992 Olympic games in Spain since the introduction of African horse sickness.

As a result of the public meeting to evaluate the CEM import requirements, APHIS is continuing its efforts to streamline the CEM import regulations. The Agency is cooperating with a Norwegian company in testing a new diagnostic test for CEM.

12. National Poultry Improvement Plan

The "U.S. Sanitation Monitored" program has been amended to provide for testing, identifying, and classifying egg-type breeding flocks for *Salmonella enteritidis*.' The changes were published in the Federal Register and became effective in July 1989. Most of the commercial egg-type chicken breeding and hatching industry is participating in this program which is expected to go a long way toward eliminating a major source of new introductions of this serious public health hazard. As a result of these new provisions, a significant reduction in Salmonella contamination is expected in the poultry industry in future years. During FY 1989, four States: West Virginia, New York, Wisconsin, and Michigan, gained the classification "U.S. Pullorum-Typhoid Clean State," signifying that certain disease control authorities have been implemented and the States have experienced no pullorum-typhoid infections for a period of 1 year. Louisiana is expected to become the 39th State to receive this classification in early 1990.

Development of a voluntary Model State Poultry Disease Prevention Program has been completed. This program allows States to be classified according to their capabilities for detecting and preventing spread of industry-disruptive poultry diseases. It allows for movement of poultry products between States with minimal and uniform restrictions when certain diseases are detected. The program will be published as a notice in the Federal Register and made available during FY 1990 to participating States in a booklet for the poultry industry.

13. Noxious Weeds

In FY 1989, APHIS made 505 interceptions at ports-of-entry involving approximately 29 different noxious weeds. APHIS also continued projects on specific noxious weeds that still pose a serious threat to waterways, rangelands, and/or crops. The program included specific work on common crupina, goatsrue, Salsola vermiculata, Orobanche ramosa, and the hydrilla eradication projects.

In 1988, a joint field trial by APHIS and Idaho cooperators resulted in the development of suitable eradication methods for the common crupina program which are now available to clear the weeds from larger areas of land. Following the discoveries of common crupina in both Oregon and Washington, control measures were applied to these infestations this year, in addition to an isolated infestation in Idaho. APHIS continued to support the goatsrue eradication program which includes the entire 39,000 acres of infested land in Utah. In FY 1989, chemical treatments and hand weedings were used to eradicate the Salsola vermiculata in California. Also, as a result of favorable survey findings, the Agency was able to reduce the Orobanche ramosa treatment area in Texas.

The Agency continued to support the cooperative hydrilla programs in Imperial County, California, in Florida, and in Mexico near the California border. In California, the fish have virtually eliminated hydrilla from 25 miles of the main canal system. The fish are being introduced into infested lateral canals consisting of almost 400 miles. With the savings from using the fish instead of mechanical harvesters, the Imperial Valley Irrigation District has built a hatchery at a cost of $330,000. APHIS is providing technical advice and assisting with the hatchery's maintenance costs. The hatchery is producing fish for both the Imperial Valley and the Mexicali irrigation systems.

The Hydrilla Eradication Action Team in California, developed a plan that calls for eradication by 1996. The team consists of four agencies including the Imperial County, California, Imperial Valley Irrigation District, California Department of Food and Agriculture, and APHIS. California and the Imperial Irrigation District are directing their efforts to California. APHIS is directing its efforts to eradicate hydrilla in the Mexicali irrigation system in Mexico. In Florida, farmers are now buying the fish commercially and releasing them into their ponds. The State of Florida is researching a small organism that feeds on the hydrilla.

14. Pink Bollworm

From May 15 to October 19, 1989, APHIS produced 820 million sterile moths at the moth rearing facility in Phoenix, Arizona. This is the fourth year in a row that production has increased using the same facility and equipment.

The pink bollworm cooperative program trapped nearly 200 native moths in the San Joaquin Valley in the 1989 season. This is a significant decrease in trappings from last year's 895 moths, and is a good indication of the program's success. Multiple detections resulted in the release of additional sterile moths in the immediate area. Follow-up Gossyplure pheromone treatments are used as necessary in the infested area to further reduce the number of moths. Areas where multiple detections occur will be closely monitored during the next season.

In FY 1989, the program again successfully used sterile moths to augment a methods demonstration in the Coachella Valley. The focus of this work is the use of pheromone attractants and sterile insects to disrupt the normal reproductive cycle of the pest.

Another component of the program is quarantine enforcement. The program surveyed fields throughout the South and found no pink bollworms east of the Mississippi River.

15. Poultry Diseases

In FY 1989, two outbreaks of velogenic viscerotropic Newcastle disease (VVND) in one State were diagnosed and eliminated in pet birds, thus preventing any spread or involvement with domestic poultry. Each was believed to have been caused by birds brought into the United States without meeting U.S. import requirements. No samples were found to be positive for avian influenza in a survey of live bird markets conducted in the New York/New Jersey market area.

During the past year there have been 64 human Salmonella enteritidis (SE) outbreaks, 1,400 confirmed cases, and 12 attributed deaths. In response, APHIS is implementing a program designed to ensure, over the next 2 years, that replacement of breeder poultry and commercial layers will be accomplished with birds from certified flocks. APHIS veterinarians continue to cooperate with State officials and other Federal agencies in helping to investigate outbreaks mainly in the northeastern States. Investigations have been carried out on premises associated with these outbreaks to identify the mode of transmission and other characteristics. Important epidemiologic information is being compiled which will aid in the development of effective control programs.

16. Pseudorabies

The State-Federal-Industry National Eradication Program began officially on January 1, 1989. Thirty States are currently receiving pseudorabies program support from APHIS. Program activity in these States emphasizes identification and cleanup of infected herds and prevention of new infections through enforcement of quarantine and swine movement requirements. All States are expected to be actively involved in pseudorabies eradication by the end of FY 1990.

In order to qualify for APHIS funding, States are required to have a pseudorabies eradication committee which includes swine producers among its membership. Forty-four States currently have such committees, and over 99 percent of the nation's swine are located in these States. All States receiving Federal funding are required to submit a quarterly report of program activity to APHIS which provides basic data to State-Federal-Industry program managers.

Instructions for achieving program status were provided to the States during June 1989. Stages I and II are preparatory and control stages only, and as such do not confer the right to ship feeder pigs and breeding stock without herd of origin testing. Stage III is the first stage requiring mandatory cleanup of infected herds. Additionally, States achieving Stage III status must have had a surveillance program in effect for at least one year and demonstrate an infected herd prevalence of not more than 1 percent. States in Stage III status may ship feeder pigs in interstate commerce without testing their herds of origin. Breeding swine as well as feeder pigs are eligible for interstate shipment from Stage IV and V States.

Seven States have qualified for admission to the National Pseudorabies Eradication Program. These States and their program stages are as follows: Stage I: Arizona, Missouri, and Texas; Stage II: Georgia and Illinois; Stage III: Arkansas and Wisconsin.

In addition to assisting with herd clean up activity, APHIS provided funding to support surveillance. This would include the testing of sows and boars at slaughter as well as testing of breeding swine at markets and on the farm as part of a "down-the-road" area testing program. In Stages III, IV, and V, when an infected herd is found, circle testing of all herds within a 1.5-mile radius is required in addition to tracing purchases and sales. All States are expected to be free of pseudorabies within 10 years.

17. Swine Health Protection

The number of licensed garbage feeders remained at approximately 4,775 in FY 1989, the same as the year before, following several years of decline. The decrease occurred due to regulatory change which permits cancellation of garbage feeders' licenses, if they do not feed garbage to swine for 4 months or longer.

During FY 1989 APHIS continued its efforts to strengthen State program compliance and enforcement. State and Federal inspectors conducted 47,346 inspections of licensed garbage facilities. During these inspections, 700 violations were detected. This is a substantial decrease from the 1,777 violations noted in FY 1988. In addition, State and Federal inspectors made more than 65,552 searches for unlicensed garbage feeders.

18. Tuberculosis

Samples from animals killed at regular slaughter with lesions grossly resembling tuberculosis totaled 4,493 in FY 1989, an all-time high. Of these, 281 resulted in initiation of traceback investigations. Three infected herds were identified, in California, Texas, and Pennsylvania. The increase in samples submitted is due to a record number of Mexican feeder steers imported in FY 1988. Those cattle came to market in FY 1989. Because of the M brand, inspectors are more aware of Mexican steers, and thus more likely to submit samples. An estimated 62 percent of feeder animals found to have lesions are of Mexican origin. The ability to identify steers imported from Mexico is saving considerable time in tracing back infected animals to their place of origin.

In FY 1989, 13 tuberculous herds were detected, 3 of which were infected, and 10 of which were exposed through association. The infected herds included a beef herd in California, a dairy herd in Texas, and a dairy herd in Pennsylvania. The California and Pennsylvania herds have been depopulated, and the Texas herd remains under quarantine until the second round of testing is complete. All 10 of the exposed herds reported in FY 1989 were depopulated. Eight of those herds were exposed in the North Dakota outbreak. The two remaining were in Texas. One tuberculous herd detected in Texas in FY 1988 was released from quarantine in FY 1989. A dairy herd detected in Louisiana in FY 1988 was depopulated early in FY 1989.

In FY 1989, the United States and Mexico met twice to discuss tuberculosis issues. In April 1989, industry representatives and Federal and State officials of both countries met in El Paso, Texas. In September 1989, another meeting was held to discuss standardization of reagents, tuberculin production, and test procedures and results. Laboratory and field trials were recommended to determine the practical consequences of differences in tuberculins and testing procedures.

19. Witchweed

Since the program's beginning in 1957, witchweed has infested more than 432,050 acres in 38 counties of North and South Carolina. To present, the program has eradicated witchweed from more than 329,512 acres and 18 counties have been released from quarantine. Through quarantine and regulatory activities, this parasitic weed is still confined to the Carolinas.

In FY 1989, the program eradicated witchweed from about 12,700 acres and released 2 counties from quarantine. New infestations of witchweed have been identified on 2,950 acres.

ANIMAL CARE

Current Activities: Under legislation first enacted in 1966 and amended several times thereafter, APHIS carries out activities designed to ensure the humane care and handling of animals used in research, exhibition, or the wholesale pet trade. A 1976 amendment gave the Secretary the authority to regulate the transportation of animals by airlines and intermediate handlers, and prohibited animal fighting ventures. Primary program emphasis is placed on inspection of facilities, investigation of complaints, reinspection of problem facilities, and training of inspectors. APHIS is also responsible for administering the Horse Protection Act of 1970 which prohibits the showing, selling, or exhibition of sore horses. APHIS inspectors personally monitor shows/sales for compliance and supervise an industry self-regulation system, the Designated Qualified Persons program (DQPs). APHIS inspectors monitor the quality of inspections made by DQPs at selected shows and, in addition, may personally examine horses at random for signs of soring and other violations of the Act and regulations.

Selected Examples of Recent Progress:

1. Animal Welfare

Final rules on Parts 1 and 2 (Definitions and Standards) of the new animal welfare regulations were published in the Federal Register on August 31, 1989, and became effective October 30, 1989. Part 3, which contains standards for the exercise of dogs and the psychological well-being of primates, was also published for public comment. The review of comments on Part 3 has begun and should be completed during the first half of FY 1990. Significant changes are anticipated, which makes it likely that Part 3 must be reproposed. Final rulemaking is not expected for at least a year on dogs and primates. Proposed changes in space requirements and transportation standards for guinea pigs, hamsters, and rabbits, which are also proposed in Part 3, have been put into final rulemaking form and will be published as final rules within a few months.

The Agency reorganization which became effective October 1, 1988, has produced a field staff of inspectors dedicated solely to animal welfare duties. An important benefit is that staff performing inspections will be given concentrated training in specialized issues. Animal care inspectors received training in horse protection, basic animal welfare, and marine mammal medicine and husbandry in FY 1989.

Numerous presentations have been made to the research community regarding the new regulations which became effective October 30. It is anticipated that questions and requests for participation will continue through FY 1990 concerning policy and clarification of the requirements in Parts 1 and 2.

2. Horse Protection

APHIS inspectors reported 79 violations of the Horse Protection regulations in FY 1989. The total number of horses inspected was 79,134. While the total number of soring violations increased, the percentage of total violations was 1.12 percent, slightly lower than in 1988.

In February of 1989, revised regulations reduced the permissible weight of action devices to 6 ounces from 8 and 10 ounce action devices that were used according to the age of the horse. The revisions included the use of pads no higher than 50 percent of the horse's natural foot, and do not provide for extension of the hoof to conform with the natural slope of the hoof. The publication of the revisions satisfied the U.S. District Court that APHIS met the conditions stipulated in the Court's order.

Soon afterwards, the American Horse Protection Association (AHPA) filed suit against the Department. This time the AHPA asked for a ban of action devices and charged APHIS with violating the intent of the Horse Protection Act by allowing any action devices to be used. The Department's Office of General Counsel is working with the AHPA's attorneys to resolve the issue.

APHIS has cooperated closely with the horse industry to reach a higher level of compliance through the Designated Qualified Person (DQP) system. The Veterinary Medical Officers and the DQPs have joined in establishing more stringent standards when determining if a horse is sore. In early FY 1990, a week-long, hands-on training course will be given to APHIS inspectors on current policies and procedures. Immediately following the training, APHIS will instruct the DQPs on current procedures and interpretation of regulatory requirements.

SCIENTIFIC AND TECHNICAL SERVICES

Current Activities: APHIS conducts programs to develop new or improve existing methods for reducing wildlife/agriculture conflicts, for controlling or eradicating harmful plant pests, and for applying new technology to assure the latest genetically engineered viral vaccines are pure, safe, potent, and effective. Additionally, the Agency conducts laboratory testing programs to support disease and pest control or eradication programs. Specific program efforts include:

Methods development. Animal Damage Control methods development activities include: a program to develop blackbird damage resistant sunflower strains; techniques for control of mountain beaver damage to western forests; methods to reduce rat damage to sugarcane and macadamia nuts;

methods for applying roost toxicants for bird control; methods to improve single dose bait consumption by coyotes. The Veterinary Biologics program is pursuing the development of test methods that will reduce the number of live animals used to test veterinary biologics, while the plant methods laboratories are working on methods to control the Africanized honey bee, improve gypsy moth rearing techniques, and to treat tropical fruits from Central and South America and the Caribbean with hot water to destroy harmful pests.

Biotechnology. In the 1980's, biotechnology has emerged as a force with the potential to improve existing products and spawn new technologies which could benefit American agriculture as well as other segments of our economy. Under its broad authority to protect plant and animal health, the Department has established a regulatory structure for bringing the benefits of genetic research from the laboratory to the marketplace, while protecting against the release of potentially harmful organisms into the environment.

Laboratory testing. The program for testing biological products is expanding to encompass the testing for licensure of products produced for intrastate as well as interstate use and the testing of genetically engineered products. The Veterinary Diagnostics program continues testing in support of the Agency's animal disease prevention, detection, control, and eradication programs.

Selected Examples of Recent Progress:

1. ADC Methods Development

In FY 1989, the Denver Wildlife Research Center's (DWRC) chemistry section developed and validated ten analytical methods of chemical analysis. These methods are needed for reregistration of chemicals such as Compound 1080, strychnine alkaloid, zinc phosphide, Starlicide (DRC-1339), and dimethyl anthranilate. The compounds are used for rat and predator control, as roost toxicants, and for taste aversion.

The program completed a survey documenting serious impacts of bird depredations on commercial catfish farming in the Delta States. Results from this survey will be used in analyzing damage distribution. They will also be used in an overall assessment of the extent of bird damage in the Delta States.

The DWRC submitted over 250 data volumes and labels to EPA in support of vertebrate registrations. Each of these data volumes supports a specific type of information that the Center is providing.

A pesticide registration consortium consisting of DWRC personnel, private registrants, and State governments collaborated to provide data in support of strychnine product reregistration. A similar informal group is looking into areas where they can work on reregistering Compound 1080 products.

2. Biotechnology

In the next few years, many genetically engineered products will be reaching the commercialization stage. Such products as a bioinsecticide producing tomato, alfalfa mosaic virus resistent alfalfa, and herbicide resistent cotton could help reduce pesticides, farm production costs, and America's trade deficit through the export of this technology abroad. A crucial factor in this process has been the Department's consistent and timely review of requests to field test products. In June 1987, APHIS published its final regulations under the coordinated Federal framework for the regulation of biotechnology.

In the 2-year interim, APHIS has established a regulatory track record that has enabled many companies to move their products from the laboratory to the field testing stage. In FY 1989, the program processed a record number of permit requests. All indicators predict that the workload should continue to expand rapidly in the coming years.

One crucial factor in the program's success has been State participation in the biotechnology regulatory process. To strengthen this partnership, APHIS held the first national conference on Federal and State regulation of biotechnology in June 1989. Participants included representatives from State regulatory agencies, the Food and Drug Administration, and the Environmental Protection Agency. Our intent was to clarify how the Coordinated Federal Framework works, discuss its merits and short comings, exchange ideas on how to improve it, and strengthen lines of communication between Federal and State regulators. We believe the conference was extremely valuable, and we plan to hold a similar one in 1990.

In the international arena, the Agency took an active role in fostering the environmentally safe transfer of genetically engineered products between nations. This effort should help to prevent unnecessary trade barriers and ease the transfer of American products into foreign markets. To accomplish this, APHIS has worked to encourage internationally consistent development practices for field testing and commercialization of genetically modified plants and animals.

In April 1988, APHIS, as part of the United States delegation, attended a meeting of the Organization of Economic Cooperation and Development's (OECD) Group of National Experts on Safety in Biotechnology Development. At the meeting, the U.S. delegation proposed that the OECD consider developing scientific principles or "Good Development Practices" to expedite the review of proposals to field test genetically engineered plants and microorganisms. The OECD is composed of most of the industrial countries of the world and has as a goal the expansion of world trade on a nondiscriminatory basis. APHIS assumed a key role in ensuring that the proposal was delivered to the working group on schedule. The OECD formally accepted the proposal and has distributed it to its member nations for comment.

In addition, APHIS has taken an active role in updating and expanding OECD's Good Industrial Large Scale Practices. This will serve as a guide for the safe industrial production of genetically engineered organisms. APHIS provided the OECD with examples of production protocols for genetically engineered veterinary biologics licensed by the Agency. Finally, APHIS participated in discussions between the European Community and the United States on biotechnology issues which may affect trade between the two entities.

3. Plant Methods Development Laboratories

The program is expanding developmental imported fire ant activities and is conducting feasibility studies on new detection tools such as pheromones and non-sticky traps.

Emphasis is being placed on the development of pest free or managed areas in Florida, the Rio Grande Valley, Mexico, and Central and South American countries. This will permit the shipment of fruit fly hosts without chemical or other post harvest treatment. In northern Mexico, the program is conducting a feasibility study on establishing a fruit fly buffer area.

The program is analyzing boll weevil trap data for pest management projects. Analytical support and testing of products and procedures for the eradication of isolated infestations are also being provided.

The Otis Plant Methods Laboratory has increased emphasis on the development of new and existing gypsy moth management techniques. Specific areas of activity include sterile insect testing techniques and the further development of bacteria and viruses as biocontrol agents.

4. Veterinary Biologics

Several studies are in progress to eliminate the problem of chicken anemia in specific pathogen free egg producers' flocks.

The program has developed reference serum panels for use in evaluating various diagnostic kits used with vaccines to control and/or eradicate pseudorabies in swine. Reference serum panels are a series of serums that are standardized because they are specific to a certain disease. The panels are used to evaluate diagnostic kits for animal health monitoring in other food animals, companion animals such as dogs and cats, laboratory animals, and poultry. After animals are vaccinated against a certain disease, the kits are used with different serum groups to determine whether the kits can diagnose this disease.

The National Veterinary Services Laboratories (NVSL) received 11,592 serials of veterinary biologicals, an increase of 260 from last year. Based on statistical sampling methods, 2,652 of these serials were tested. NVSL determined 43 serials to be unsatisfactory because they did not meet requirements of the regulations.

5. Veterinary Diagnostics

In response to the continuing Salmonella problem throughout the United States, the program has expanded Salmonella characterization capabilities by introducing phage typing to their existing battery of tests. Phage typing is a more definitive method of testing that enables a laboratory to identify not only a particular bacteria type, but also organisms that are specific to another bacteria type.

Program personnel made preparations to deal with a new disease entity in domestic rabbits from Mexico. If this agent, tentatively identified as a parvovirus, gains entry into the United States, NVSL personnel are prepared to diagnose the disease in an efficient and timely manner.

Exotic ticks collected from imported ostriches were identified at NVSL. These ticks are suspected of transmitting numerous foreign animal diseases.

The Agency tested swine and swine semen offered for import from the People's Republic of China. The clearance of these specimens will permit germplasm, which was previously unavailable in this country, to be safely introduced into the United States.

The program initiated a proficiency test program for users of the Particle Concentration Fluorescence Immunoassay (PCFIA) tests. This test program made further standardization of brucellosis testing possible. The PCFIA test was recently designated an official test in the State-Federal Brucellosis Eradication program.

CONTINGENCY FUND

APHIS maintains the contingency fund to enable quick response to emergency outbreaks of pests, insects, or diseases. Since these funds are appropriated on a no-year basis, the total available includes funds carried over from the prior year. The FY 1989 releases from the contingency fund are shown below:

Obligations

	FY 1989
Plant disease and pest control:	
Mediterranean fruit fly - California	$2,604,000
Mediterranean fruit fly - Guatemala	441,000
Total, Plant disease and pest control	3,045,000
Animal disease and pest control:	
Exotic Newcastle disease (VVND)	157,524
Exotic ticks	140,072
Salmonella enteritidis	498,436
Tuberculosis	328,933
Total, Animal disease and pest control	1,124,965
Total obligations.....................	4,169,965
Unobligated balances..................	565,034
Total, available, contingency fund....	4,734,999

Mediterranean Fruit Fly (Medfly) - California - The Medfly is one of the world's most destructive pests of over 200 species of fruits and vegetables. It is currently found throughout Central America and is capable of becoming established in fruit and vegetable growing regions in both Mexico and the continental United States. Approximately 80 percent of U.S. citrus production is susceptible to Medfly and its presence in the U.S. would severely disrupt the $12.3 billion fruit and vegetable industry, as well as our export markets.

On September 26, 1988, a single adult Medfly was trapped near Culver City in Los Angeles County, California. By October 5, 1988, 48 adult Medfly and 48 larvae had been detected. APHIS and the State of California initiated efforts to eradicate this infestation. APHIS used $2,604,000 of the Contingency funds to pay its share of the costs.

The California Department of Food and Agriculture is responsible for chemical control operations. APHIS conducted most of the regulatory activities, assisted with survey operations and provided support for the production and release of sterile flies. This infestation was declared eradicated on June 12, 1989.

In 1989, an infestation of Medflies and oriental fruit flies was detected in the counties of Los Angeles, Santa Clara and San Bernardino, California which will necessitate APHIS participation.

Mediterranean Fruit Fly - Guatemala - The presence of the Medfly in Mexico would pose a serious threat to the United States both because of Mexico's neighboring location and its status as a chief source of winter fruits and vegetables for the United States. The cooperative APHIS-Mexico-Guatemala program seeks to establish a barrier zone and eventually eradicate the Medfly in Guatemala. Eradication of infestations in Guatemala is necessary in order to maintain the integrity of the barrier zone and to protect Medfly free areas of Guatemala and Mexico.

APHIS used $441,000 in contingency funds to control recent Medfly outbreaks in Guatemala. The funds were used to reopen seven quarantine stations, hire temporary personnel, to strip fruit trees. Funds were also used to increase sterile fly production, pay travel expenses, and provide technical support and evaluation.

The Mexican government provided the program with an airplane and a helicopter to release sterile flies over infested areas, as well as to cover its share of the increased program costs of trapping, fruit sampling, and ground application of pesticides.

Exotic Newcastle Disease (VVND) - This disease is an acute, rapidly spreading viral disease that can kill all of the poultry it infects. It is estimated that endemic VVND in the United States could result in annual losses of over $500 million. Exotic Newcastle disease was confirmed at a pet store in Stratford, Connecticut. Infection was introduced into this flock by birds of questionable origin purchased in Texas. Several of the suspect premises in this outbreak are located near large poultry populations. Because VVND is highly contagious and easily transmitted, the threat to the domestic poultry industry was great. Contingency funds were used for investigation, epidemiology, cleaning and disinfection, and for indemnity claims.

Exotic Ticks - Exotic ticks are known to transmit Heartwater disease, Nairobi sheep disease, Q-fever, East Coast Fever, and tick-paralysis in domestic animals. Ticks were discovered in a group of ostriches imported from Zimbabwe. The birds were shipped to various locations in Texas, Oklahoma, and Ohio, and were subsequently located and quarantined. It is estimated that if these ticks became established in the United States, our livestock industry would suffer over $1 billion in losses. Contingency funds were used for surveillance activities and for field inspection and treatment.

Salmonella enteritidis (SE) - Over the past three years, there have been several outbreaks of salmonellosis in humans, including several deaths caused by the bacterial organism SE. This problem has become a serious public health issue. In addition to the human costs of illness and death, it has been estimated that Salmonella of various species produces over $2 billion in annual losses to the U.S. poultry industry. Contingency funds are being used to implement a program to ensure that replacement of breeder poultry and commercial layers will be accomplished with birds from certified flocks. Program costs include laboratory testing and monitoring, a spent hen survey, epidemiological and laboratory support to the States in connection with outbreaks in humans, education, publicity, research and methods development, and compliance.

Tuberculosis - Bovine tuberculosis (TB) is a chronic, sometimes acute disease affecting cattle, and is capable of causing progressive disease in almost all warmblooded vertebrates. TB is a cyclical disease. It can take years for evidence of infection in a herd to become known. Sporadic outbreaks can occur, making it very difficult to predict accurate funding requirements. In FY 1989, program activity was unusually intense. Several herds were depopulated and outbreaks in Louisiana and Texas required prompt action that was outside the limits of available funding for FY 1989. Contingency funds were used for depopulation of herds, testing, and indemnity.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

BUILDINGS AND FACILITIES

Appropriation Act, 1990	$13,422,000
Budget Estimate, 1991	25,396,000
Increase in Appropriation	+11,974,000

Adjustments in 1990:		
Appropriations Act, 1990	$13,422,000	
Gramm-Rudman-Hollings Reduction (P.L. 101-177)	-37,000	
Transfer from ARS a/	+223,000	
Adjusted base for 1990		13,608,000
Budget Estimate, Current Law, 1991		25,396,000
Increase over adjusted, 1990		+11,788,000

a/ The transfer from ARS is part of a cooperative agreement between APHIS and ARS covering maintenance costs for the Plum Island facility.

SUMMARY OF INCREASES AND DECREASES-CURRENT LAW
(on basis of adjusted appropriation)

Item of Change	1990 Estimated	Program Changes	1991 Estimated
Decrease of one time construction projects in 1990	$9,800,000	-$9,800,000	--
Maintenance of buildings and facilities	3,808,000	+588,000	$4,396,000
Construction of Fort Collins Research Center	--	+4,000,000	4,000,000
Construction of the Germ Plasm Quarantine Facility in Beltsville, Maryland	--	+12,000,000	12,000,000
Plum Island Animal Disease Center consolidation	--	+5,000,000	5,000,000
Total Available	13,608,000	+11,788,000	25,396,000

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The estimates include appropriation language for this item as follows (new language is underscored; deleted matter is enclosed in brackets):

Buildings and Facilities

For plans, construction, repair, improvement, extension, alteration, and purchase of fixed equipment or facilities, as authorized by 7 U.S.C. 2250, and acquisition of land as authorized by 7 U.S.C. 428a, [$13,422,000], $25,396,000.

BUILDINGS AND FACILITIES

PROJECT STATEMENT
(On basis of available funds)

	1989 Actual	1990 Estimated	Increase or Decrease	1991 Estimated
Construction of facilities.....	$2,285,572	$13,608,000	+$11,788,000	$25,396,000
Unobligated balance available, start of year................	-76,446	-336,874	--	-336,874
Unobligated balance available, end of year..................	336,874	336,874	--	336,874
Total, Estimated appropriated funds...........	2,546,000	13,608,000	+11,788,000	25,396,000
Transfer from ARS..............		-223,000		
Gramm Rudman Hollings Reduction P.L. 99-177..................		+37,000		
Total Appropriation............	2,546,000	13,422,000		

EXPLANATION OF PROGRAM

The APHIS appropriation "Buildings and Facilities" funds major non-recurring construction projects in support of specific program activities and recurring construction, alterations, and repairs of existing APHIS facilities.

JUSTIFICATION OF INCREASES AND DECREASES

(1) A decrease of $9,800,000 for one time construction projects in FY 1990.

(2) An increase of $11,788,000 for buildings and facilities ($13,608,000 available in FY 1990).

(a) An increase of $588,000 for buildings and facilities ($3,808,000 available in FY 1990).

Need for Change. Plans, construction, repairs, alterations, and improvements are performed as needed for APHIS facilities including animal quarantine stations, border inspection stations, sterile insect rearing facilities, and laboratories. As the buildings age, major repairs or replacement of items, such as roofs, heating and ventilation systems, air conditioning, etc., become critical to the overall building operation. The Agency performs these repairs and replaces items as needed. Inflation, the need to adapt buildings to new functions, deterioration of aging buildings, and additional buildings acquired in recent years have greatly reduced the Agency's ability to meet its needs.

Nature of Change. This increase will allow for more timely and adequate maintenance and repair of the APHIS operated facilities.

(b) An increase of $4,000,000 for construction of the Fort Collins Wildlife Research Center (FCWRC).

Need for Change. Facilities at the Denver Wildlife Research Center (DWRC) for research and methods development are not adequate to meet the requirements of the Animal Welfare Act and Good Laboratory Practices (GLP) regulations mandated by the Environmental Protection Agency (EPA) for pesticide registrations. Animal holding facilities and associated laboratories are decentralized and are outdated in terms of meeting regulatory standards for animal care and maintenance. The Wildlife Research Center master plan, currently under development by APHIS, is expected to call for the site of the Wildlife Research Center to be moved to a more suitable location in Fort Collins, Colorado. The move will likely be conducted in phases, with the first phase including construction of animal holding facilities at the new site.

Nature of Change. These funds, together with the funds available in FY 1990 for DWRC, will finance the relocation of facilities from Denver to Fort Collins, Colorado. Activities will include site preparation, and construction of holding facilities and laboratories.

(c) An increase of $12,000,000 to construct the Plant Germ Plasm Quarantine Center.

Need for a Change. APHIS is responsible for ensuring that U.S. agriculture is protected from the threat of exotic pathogens, pests, and weeds. Over the years, the demand for, and importation of, foreign germ plasm has dramatically increased while the quarantine related facilities have deteriorated and staffing has remained unchanged. Long delays in the processing and release of foreign germ plasm have led to increased frustration among end users of foreign germ plasm. Individuals have been encouraged, because of these delays, to smuggle materials into the country which significantly increases the likelihood of accidental introduction of exotic organisms.

The facilities currently utilized for the germ plasm quarantine activities are too small, dispersed, antiquated, understaffed, and lack adequate security for the volume of material requiring processing. Consequently, a 10-year backlog of material has accumulated. The new Plant Germ Plasm Quarantine Center will take approximately 3 years, and will cost a total of about $36 million to complete. The development program includes the construction of greenhouses and screenhouses, and related structures.

Nature of Change. The increase will be used to fund the first phase of the three phase Master Plan to complete construction of the National Germ Plasm Quarantine Facility at Beltsville, Maryland. This first phase will include: land development, a high security greenhouse, two quarantine greenhouses, eight quarantine screenhouses, and a pesticide storage building.

(d) An increase of $5,000,000 for the APHIS share of the Plum Island Animal Disease Center consolidation.

Need for Change. The Plum Island Animal Disease Center (PIADC) is located on an island in order to allow research into and diagnostic testing for exotic and highly contagious animal diseases without endangering the domestic animal population. The facility, shared by APHIS and the Agricultural Research Service (ARS), is located in a harsh environment which is buffeted by severe weather and seas. A consolidation plan has been proposed jointly by APHIS and ARS, and endorsed by the Secretary's Advisory Committee on Foreign Animal and Poultry Diseases, which would move APHIS diagnostic activities to one building at PIADC. Necessary improvements to the building and its surroundings, such as laboratory renovations, road repairs, and roof repairs, would be made as part of the consolidation plan.

Nature of Change. This increase would fund the APHIS share of the consolidation. Improvements and repairs would be made to Building 101 at PIADC in preparation for the consolidation of APHIS activities into this building. Improvements will include lab renovation, roof repairs, installation of improved laboratory filtration, new incinerators, new autoclaves, and other building repairs.

STATUS OF MAJOR CONSTRUCTION PROJECTS
AS OF OCTOBER 1989

Location and Purpose	Year	Funds Provided	Description
Hawaii, Waimanalo	1981 1986	$3,800,000 1,901,000	Construction on the Waimanalo facility began in November 1987, and was completed in November 1989. This facility will be used to rear the sterile Mediterranean fruit flies.
Iowa, Ames	1989	1,000,000	Waste water pre-treatment plant, completed in November 1989.
Mexico, Tuxtla	1989	1,000,000	Repair water treatment system for the Mexican fruit fly rearing facility.
TOTAL		$7,701,000	

PASSENGER MOTOR VEHICLES

The 1991 Budget Estimates propose the purchase of 140 replacement passenger motor vehicles.

The passenger motor vehicles of the Service are used by veterinarians, animal health technicians, plant protection and quarantine officers, inspectors, wildlife biologists, and other technical personnel in the performance of their duties. APHIS personnel use passenger motor vehicles during their daily activities to travel between individual ranches, farms, orchards, nurseries, ports, and other commercial firms. Use of common carriers is not feasible because of the need to travel in mostly rural areas. Comparative costs studies have shown that it is more economical to use Government owned vehicles rather than reimburse employees for the use of privately owned cars.

The Service's policy is to pool vehicles for use as much as possible. This results in a minimum of passenger motor vehicles and reduces overall operating costs. Operators are required to maintain and submit operational data. These periodic surveys are made to determine the continued need for vehicles and their condition.

Replacement of passenger motor vehicles. Replacement of 140 of the 559 vehicles estimated to be in operation at the beginning of FY 1991 is proposed. These 559 vehicles are located in 293 field locations and are used for pest and disease exclusion, plant and animal health monitoring, pest and disease management, animal care, scientific and technical services programs. The control, eradication, testing, and inspection activities are essential in protecting the Nation's agriculture. All vehicles proposed for replacement have 60,000 or more miles or are more than 6 years of age.

Age and mileage data for passenger motor vehicles on hand as of September 30, 1989, are as follows:

AGE DATA

Age-Year Model	Number of Vehicles	Percent of Total
1984 & older	281	48%
1985	40	7%
1986	128	22%
1987	5	1%
1988	107	18%
1989	22	4%
TOTAL	583	100%

MILEAGE DATA

Lifetime Mileage (Thousands)	Number Vehicles	Percent of Total
80 or more	103	18%
60 - 80	133	23%
40 - 60	121	21%
20 - 40	125	21%
20 or less	101	17%
TOTAL	583	100%

AIRCRAFT

The 1991 Budget Estimates propose the replacement of 4 of the aircraft presently maintained by the Agency. There are presently 19 aircraft in the Agency fleet, 2 for pest and disease exclusion and 17 for pest and disease management programs. During FY 1989, there were two aircraft replaced. The aircraft make aerial surveys and aerial application tests, are used for insect trapping operations, and to demonstrate the use of special equipment for suppression of destructive insects attacking crops.

Replacement

The replacement aircraft will be used primarily in pest and disease management programs. These aircraft are sometimes used to supervise and observe contract planes which are newer, faster models than those the Agency has available. While this replacement authority is requested each year in the appropriation act, the aircraft are replaced only when necessary to maintain the fleet in safe and efficient operating condition.

TUESDAY, MARCH 20, 1990.

AGRICULTURAL MARKETING SERVICE

WITNESSES

JO ANN SMITH, ASSISTANT SECRETARY FOR MARKETING AND INSPECTION SERVICES

DANIEL D. HALEY, ADMINISTRATOR, AGRICULTURAL MARKETING SERVICE

KENNETH C. CLAYTON, DEPUTY ADMINISTRATOR, MARKETING PROGRAMS

LINDA P. MASSARO, DEPUTY ADMINISTRATOR FOR MANAGEMENT

JOSEPH A. ROEDER, DIRECTOR, FINANCIAL MANAGEMENT DIVISION

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Mr. WHITTEN. The subcommittee will come to order.

We have with us today Ms. Smith, again representing the Department, along with Mr. Haley, and Mr. Clayton of AMS. We are glad to have all of you here and we will be glad to have the biographical sketches included in the record in those cases where it is necessary.

[CLERK'S NOTE.—The biographical sketch of Mr. Haley appears on page 539.]

Ms. SMITH. Thank you, Mr. Chairman. As you say, accompanying me today is Dan Haley, the Administrator of AMS, and several members of his staff. Before Mr. Haley presents his budget, I would like to briefly comment on a particular issue that you will find in this budget proposal. The issue I am particularly interested in is the coordinated USDA Food Safety Initiative.

I strongly support AMS' request for funds to develop a database of pesticide usage and residue data. The database will fill the information void that currently exists. Although I believe our food supply is very safe, we need to compile and disseminate accurate data to restore both foreign and domestic confidence in the quality of American agricultural products. The void in our data relates to accurate information on pesticides and residue on food. You will find this program in AMS' budget proposal.

I would like at this time to turn the microphone over to Mr. Haley for his budget presentation.

Mr. WHITTEN. We'd be glad to hear from you, Mr. Haley.

AMS MISSION

Mr. HALEY. Mr. Chairman and members of the committee, I appreciate the opportunity to appear before you today to present the AMS fiscal year 1991 budget request. I might also add that I am especially pleased and hope it is a good omen that I am here on National Agriculture Day. Accompanying me today, as Ms. Smith indicated, are Ken Clayton, Deputy Administrator for Marketing Programs; Linda Massaro, Deputy Administrator for Management; and Joseph Roeder, Director of the Financial Management Division.

Mr. Chairman, I would like to begin by briefly summarizing two areas: one, our mission; and two, the specific budget request, with particular emphasis on the Department's Food Safety Initiative, mentioned by Assistant Secretary Smith.

As you are well aware, the Agricultural Marketing Service administers more than 30 statutes which authorize us to carry out a wide array of programs aimed at facilitating the marketing of agricultural products. We provide comprehensive market information on a daily basis through our market news program; develop and maintain some 600 different quality standards for agricultural products; inspect and grade commodities; procure surplus agricultural commodities with Section 32 purchases; administer agricultural marketing orders; conduct market research; and conduct cooperative programs with the States to improve local marketing systems.

The goal of these programs is to make the U.S. marketing process the most efficient, dependable, economical, and equitable system possible. We strive to adapt our services to changing marketing practices and technological advances, and to be reflective of producers' and consumers' needs.

Obviously, we hope you agree that our budget request includes funding to respond to these challenges.

BUDGET REQUEST

Now, I would like to go through the funding requests and part of the handout that has been provided to you by our staff.

In our Marketing Services accounts we are requesting additional funding of:

—$15.8 million to initiate a pesticide residue monitoring program for fresh fruits and vegetables in our Market Protection and Promotion program.

—$1.1 million in the Egg Products Inspection program for increased monitoring and more prompt enforcement of regulations governing safety and wholesomeness of egg products.

—$535 thousand for our Market News program to continue development of a computerized database and communications network.

In our Section 32 Administrative account, we are requesting:

—$1.2 million for operational costs associated with the Processed Commodity Inventory Management system.

—Also $352 thousand to improve administration of marketing agreements and orders.

Finally, we are also requesting $540,000 to offset increased costs in non-salary operating expenses, and $1.5 million for increased pay costs.

In addition to these changes, we have three user fee legislative proposals which, if enacted, would reduce our need for appropriated funds. They are in the area of tobacco market news printed and mailed reports, standards development, and administration of marketing orders programs.

FOOD SAFETY

At this point I would like to more fully explain our need for increased funding to enable us to react to the food safety issues which are of national interest. Our fiscal year 1991 budget proposal of $15.8 million for food safety is part of an overall USDA coordinated effort to address this issue. The total, as you know, is $25 million. The Agricultural Marketing Service's involvement in this Departmental initiative is to develop a nationwide pesticide residue monitoring program. The goal of the program will be twofold: first, to develop a comprehensive database on pesticide residues that will be Federally-administered and State-operated to help ensure the safety of the domestically-produced American food supply; and second, to communicate this food safety information to consumers both in the United States and to our international trading partners.

During the first year, our efforts will be limited to pesticide residues found on fresh fruits and vegetables in high production States. In subsequent years, our efforts will be expanded to include other States and other commodities. Under the proposed program, States will sample and test commodities within market distribution channels and/or retail levels for pesticide residues. Uniform protocols for random sample collection, pesticide analyses, and data reporting, including laboratory quality assurance programs, will be used. AMS will consolidate and analyze this information and regularly report the public health significance to the public, the media, and Government officials.

RISK ASSESSMENT

One of the key goals, if not the primary one, of this whole program will be to improve the Government-wide risk assessment and risk management procedures on which to make better public policy decisions. AMS' program will be interconnected with the pesticide usage survey of the National Agricultural Statistics Service and the Economic Research Service, as well as the residue exposure assessment initiative of the Human Nutrition Information Service.

Mr. Chairman, at this time I would like to end my oral statement and respond to any questions that you and the other members may have.

[CLERK'S NOTE.—Mr. Haley's statement appears on pages 540 through 551. The explanatory notes appear on pages 552 through 606.]

USER FEES

Mr. WHITTEN. We will be glad to include your full statement in the record.

I notice once again that your budget request proposes the collection of user fees. How many years does this make it that you've asked for user fees? Have you gotten anyone to introduce these user fee bills?

Mr. HALEY. Our budget request includes three user fee proposals. One is for tobacco printed market news reports—a $30,000 user fee proposal.

Mr. WHITTEN. Have you had anybody in Congress introduce them? This subcommittee has turned down user fee proposals regularly throughout this bill. Usually the Department doesn't bother to introduce legislation. It has become a way of accounting for money which makes your budget look smooth. What is your attitude here? Is there a bill pending on any of these proposals?

Mr. HALEY. No, there are no bills pending Mr. Chairman, but we are actively seeking support and are willing to work with any interested member.

Mr. WHITTEN. You just agreed with the Department that you would like to propose legislation that would give you an offset in your budget presentation. Let me ask a couple of specific questions regarding this issue.

During last year's hearing, Mr. Boyle testified that new user fees were being proposed for the postage, printing, and handling costs associated with tobacco market news reports to provide uniformity and consistency in the administration of the Market News program. Again this year, you propose the same. What encouragement do you have that you will have success this year?

Mr. HALEY. The user fee proposal for tobacco market news printed reports was submitted to Congress last spring. At this point, a specific sponsor for the Bill has not been found. However, we will actively seek sponsorship for the proposal and are hopeful that Congress will assist in our effort to charge beneficiaries the cost of services which are provided to them. Other commodity programs within AMS charge for their printed market news reports. The recovery of postage, printing, and handling costs associated with printed tobacco market news reports would provide uniformity and consistency in the administration of the whole market news program.

Mr. WHITTEN. Once again you are proposing user fees to recover the costs of administering the Marketing Agreements and Orders program. You were unsuccessful last year in getting this bill introduced. What evidence do you have that you will be more successful this year? Has this proposal been formally submitted to Congress?

Mr. HALEY. User fee legislation for Marketing Agreements and Orders was submitted to the Congress last spring. Although the Department has actively sought sponsorship, it has yet to be introduced by Congress. We will continue our efforts to have the Bill introduced as we strongly feel that this program should be financed by the identifiable recipients of services.

Mr. WHITTEN. What is the status of your proposals of new user fees for the Standardization Program and the Marketing Assistance Program?

Mr. HALEY. The user fee proposal for standardization was signed by Secretary Yeutter on March 15, 1990, and forwarded to Congress; to date, it has not been introduced by Congress. The user fee proposal for the marketing assistance program is included in the user fee proposal for the marketing agreements and orders program.

FOOD SAFETY

Mr. WHITTEN. We have a long record of trying to protect our food supply and we will continue to do so. The Secretary of HHS issued a statement in connection with his decision to ban the use of Red No. 3 in which he stated the actual risk posed by Red No. 3 is extremely small; however, under the Delaney Clause, products shown to have carcinogenic effect in laboratory tests, no matter how small, cannot be approved for use by FDA. Mr. Delaney had his amendment adopted, I believe, when you could detect a level of one part per million. Prior to his death and while he was still serving in Congress, scientific advances have allowed us to now test in parts per trillion. Mr. Delaney agreed that some adjustment to his clause should be made—as long as we kept his name on the Amendment, he would cooperate. We have been unable to get a practical sort of bill passed. So for many years now we have operated under sufferance. In other words, you could crack your whip anytime you want to because there is no such thing as zero tolerance.

In the book I wrote in 1966, I spelled out in detail that we had to do something to protect our environment. At the request of Mr. Mahon, this subcommittee handled EPA for a long time. We began to get some biased and untrue stories, so I was as good to him as he was to me—I told him to take it back.

I supported Mr. Boland who succeeded me as the Chairman responsible for EPA. We do need—we needed then and we need now to give protection to our environment, and I have been on that side all along.

The Delaney Amendment calls for zero, and there is no way to have anything such as zero. As I pointed out in my book, scientists would be able to measure the remaining carbon in the air from the Chicago fire or the tremors from the 1906 San Francisco earthquake. We would be able to find traces of just about anything under this measurement.

Your budget request asks for a large increase to support the Department's Food Safety Initiative. We support this objective, but what testing have you done to justify your request for these funds, or are you just requesting this money to set a program up before you find out whether there is any real need for it or not? I am asking where you stand now.

FOOD SAFETY TESTING

Mr. HALEY. I think our program follows your recommendation. We are not looking for zero risk. What we hope to prove and show to the American people is that there is such a thing as biological zero risk—no adverse effect resulting from the very low residues that exist in our food supply.

Mr. WHITTEN. Now, if that is your purpose, and don't misunderstand me. As I understand it, your request for additional funds is to prove it is not needed.

Mr. HALEY. That's correct. We're hopeful our survey will illustrate our food supply is safe. On the other hand, our surveys will uncover potential problem areas if indeed they exist.

Mr. WHITTEN. Do you need that on a full scale or can you spot check first to see whether you need these funds, because you have just said that your purpose is to prove that you don't really need it, and that goes back to the quality. Of course, I say this advisedly knowing it is going to be misunderstood. Now, we are treading where angels fear to tread in view of the drift we see in today's public sentiment. Food safety is a very emotional issue with some people. We have a ceiling on what we can spend in Congress—Gramm-Rudman. We adopt a budget resolution. Once that is adopted, the committee has to meet and decide how 302 funds will be allocated to the various subcommittees. As Chairman of the Committee, I have the job of bringing 12 people together, 14 including this one, within the limits of the 302 allocation possible. We are all for the end result that you seek, but what kind of testing have you done on a spot check basis to justify this much money?

Mr. HALEY. Mr. Chairman, we are in the preliminary stages now of negotiations with various states regarding testing procedures and other components of the program. We envision that this program will use a random sampling spot check system. There is no way we could test all the products sold.

Mr. WHITTEN. Well, now, this has been going on for more than a year and you haven't done any spot checking up to now? Your agency has a lot of money that is not tied down. How much money do you have for AMS this year?

Mr. HALEY. We have approximately $52 million appropriated funds to use this year in Marketing Services, however, all of these funds are committed for on-going programs which we traditionally provide. The budget request we now have marks the first time that the USDA will enter into pesticide residue testing.

Mr. WHITTEN. It may be the first time that you are requesting a specific amount for this purpose, but AMS has a $52 million budget and the personnel to go with it and you haven't done any spot checking prior to coming before this subcommittee.

Mr. HALEY. Because our funds are committed for on-going programs, we have been unable to do any spot checking. However, we are relying on the very comprehensive information the State programs collect.

Mr. WHITTEN. Could you give us a list of those States and what you found?

Mr. HALEY. Absolutely. I'll have it for the record.

[The information follows:]

We have found, through an informal telephone survey of all 50 States, that various individual States collect samples for pesticide residue analyses and reporting. However, the nature and extent of these State-operated programs differ significantly. For example: California has an ongoing pesticide monitoring program which, for 1988, involved 14,502 samples. The program is composed of four major components: Marketplace Surveillance, Priority Pesticide Program (formerly known as Focused Monitoring), Produce Destined for Processing, and Preharvest Monitoring.

Florida conducts a problem-oriented pesticide residue monitoring program that involves approximately 5,000 samples per year of leafy vegetables and citrus fruits.

Washington patterns its pesticide program after that of the Food and Drug Administration and monitors for the misuse of pesticides. Over 1,000 samples were obtained last year, with special emphasis on Alar in apples.

We have invited the above three States, as well as Michigan, New York, and Texas, to participate in the pesticide residue monitoring program for fresh fruits and vegetables in FY 1991. AMS has initiated onsite visits to these States to discuss the Department's food safety data initiative and to obtain more complete information on each State's residue program. Visits have been made to California and Florida. A trip to Washington is presently being arranged and visits to Michigan, New York, and Texas will follow as soon as possible.

Mr. WHITTEN. Now, you understand we are just as interested in this issue as you are but we also have a responsibility here. I just want to know how prepared your agency is to handle such a program. From reading the press and listening to the news, we hear about the danger of Salmonella enteritidis in eggs, Alar on apples, as well as many other issues that have scared the public. If there is a serious threat to public health then we ought to do something about it. But I wonder what preparation you have done to justify your request. The Department has proposed legislation that would cut the overall appropriation by $1.1 billion. You want these increases and we want you to have them if you show you have a need for them.

MARKET NEWS SERVICE

Please provide a breakdown of your requested increase of $174,000 to offset increased operating costs.

[The information follows:]

	Amount
Travel	$21,000
Transportation of things	2,000
Rent, communication, and utilities	67,000
Printing	2,000
Other services	63,000
Supplies and materials	9,000
Equipment	10,000
Total	174,000

Mr. WHITTEN. Please update the Committee on the status of the development of a computerized database and communications network.

Mr. HALEY. The Market News Information System and communications network development is currently on schedule. To date, the contractor has identified all requirements, designed the basic system, developed the software, and established an implementation plan. We expect a completion date of January, 1992.

Mr. WHITTEN. You are requesting an increase of $535,000 for a database so that information can be stored and retrieved without having to be manually pulled together and re-keyed into a useful format. Will this request cover the full implementation of the new system or will there be more requests in future budgets?

Mr. HALEY. We do not anticipate any future budget requests for the implementation of the market news database.

Mr. WHITTEN. Provide a list of current Market News Offices.

[The information follows:]

Cotton market news offices are located in: Birmingham, AL; Fresno, CA; Memphis, TN; and Lubbock, TX. In addition, classing offices supply information to the Market News Branch headquarters in Memphis for area and national reports.

The dairy market news office is located in Madison, WI.

Fruit and Vegetable market news offices are located in: Montgomery, AL; Nogales and Phoenix, AZ; Bakersfield, El Centro, Fresno, Los Angeles, Sacramento, Salinas, San Francisco and Stockton, CA; Denver, CO; Miami, and Winter Park, FL; Atlanta and Thomasville, GA; Honolulu, HI; Idaho Falls, ID; Chicago, IL; Baton Rouge and New Orleans, LA; Presque Isle, ME; Baltimore, MD; Boston, MA; Benton Harbor and Detroit, MI; St. Louis, MO; Bridgeton, NJ; Las Cruces, NM; Buffalo, Bronx, New York City, Rochester, and Walden, NY; Asheville, Faison and Raleigh, NC; Cincinnati, OH; Oklahoma City OK; Philadelphia and Pittsburgh, PA; Columbia, SC; Austin, Dallas and McAllen, TX; Onley and Richmond, VA; Seatle and Yakima, WA; and Inwood, WV.

Livestock and Grain market news offices are located in: Montgomery, AL; Phoenix, AZ; Little Rock, AR; Bell and Visalia, CA; Greeley, CO; Winter Park, FL; Thomasville, GA; National Stockyards and Springfield, IL; Indianapolis, IN; Des Moines and Sioux City, IA; Dodge City, KS; Louisville, KY; Baton Rouge, LA; South St. Paul, MN; St. Joseph, MO; Billings, MT; Omaha, NE; Albany, NY; West Fargo, ND; Oklahoma City, OK; Portland, OR; Lancaster, PA; Columbia, SC; Sioux Falls, SD; Nashville, TN; Amarillo, San Angelo and San Antonio, TX; Richmond, VA; Moses Lake, WA; and Torrington, WY.

Poultry market news offices are located in: Bell and Sacramento, CA; Denver, CO; Hartford, CT; Tallahassee and Winter Haven, FL; Atlanta, GA; Des Moines, IA; Glen Ellyn, IL; Baton Rouge, LA; Jackson, MS; Kansas City, MO; Edison, NJ; Raleigh, NC; Austin, TX; and Harrisonburg and Richmond, VA.

Tobacco market news offices are located in: Valdosta, GA; Lexington, KY; Raleigh, NC; and Florence, SC.

Mr. WHITTEN. Were any offices closed or merged in fiscal year 1989? If so, for what reasons?

Mr. HALEY. In the Fruit and Vegetable Division, the Pompano Beach, Florida, market news office was closed and the reporting responsibilities of that office were transferred to the Winter Park, Florida, market news office. The office was closed because the number of selling brokers on the Pompano farmers' market had declined so much that viable prices could not be reported. Also due to New York State financial problems, the state market news office in Riverhead, New York, was closed and the reporting of Long Island potatoes was transferred to the Walden, New York, market news office.

In the Dairy Division, the Minneapolis, Minnesota, office was closed and all reporting activities were consolidated in the Madison, Wisconsin, office. This consolidation was made to provide a more cost efficient use of personnel and equipment.

In the Livestock and Seed Division, the Minneapolis, Minnesota, market news office was merged with the office in St. Paul, Minnesota. The Princeton, New Jersey, office was closed and reporting functions were transferred to the Bell, California, and the Des Moines, Iowa, offices. The Peoria office was merged with the Springfield, Illinois, office in May. The mergers were made to reduce operating expenses and to better utilize existing personnel.

Mr. WHITTEN. Do you plan on closing or merging any offices in fiscal year 1990?

Mr. HALEY. Yes, thus far in fiscal year 1990, the Fruit and Vegetable Division Madison, Wisconsin and Creamery, Pennsylvania, market news offices have been closed. Reporting duties for the Madison, Wisconsin, market news office have been merged with the Denver, Colorado, market news office. Market news reporting previously done by the Creamery, Pennsylvania, office has been transferred to the Philadelphia and Pittsburgh, Pennsylvania, market news offices. We do not plan to close or merge any other market news offices in fiscal year 1990.

Mr. WHITTEN. Were there any market news reports that were eliminated or consolidated in fiscal year 1989?

Mr. HALEY. In the Fruit and Vegetable Division, the Pompano Beach, Florida, Famers' Market Report and the Riverhead, New

York, Potato Report were discontinued. There were approximately 225 copies issued daily. Approximately $85,000 in savings resulted from closing the offices which provided these reports.

In the Livestock and Seed Division, the East Coast Meat Report was eliminated. There were 121 copies distributed weekly, with a total cost savings of $2,000.

INSPECTION, GRADING AND STANDARDIZATION

Mr. **Whitten**. The number of commodities covered under agricultural commodity standards increased by 53 in fiscal year 1989 over both fiscal year 1988 actuals and last year's estimates for fiscal year 1989. Please list for the record these 53 commodities along with a brief explanation for the unanticipated increase.

[The information follows:]

The 53 additional standards relate to international stardards for dairy products. The commodities covered by these standards are: butter and whey butter, butteroil, evaporated milk, sweetened condensed milk, whole milk powder, cheese, whey cheese, process(ed) cheese, spreadable process(ed) cheese, process(ed) cheese preparation, cream for direct consumption, cream powder, yogurt. flavored yogurt, edible, acid casein, edible caseinates, Cheddar, Danablu, Danbo, Edam, Gouda, Havarti, Samsoe, Cheshire, Emmentaler, Gruyere, Tilsiter, Limburger, Saint-Paulin, Svecia, Provolone, Cottage cheese including creamed Cottage cheese, Butterkase, Coulommiers, Gudbrandsdalsost (whey cheese), Harzer Kase, Herrgardsost, Hushallsost, Norvegia, Maribo, Fynbo, Esrom, Romadur, Amsterdam, Leidse, Friese, cream cheese, certain blue veined cheeses, Camembert, Brie, and extra hard grating cheese. These standards had not previously been reported on our list of commodities covered under AMS standards.

Mr. **Whitten**. The OIG has discovered a numbr of problems within AMS regarding meat grading and certification, grade labeling and advertising requirements, and egg inspection activities. Many of the problems resulted from a lack of proper documentation, follow-up reviews of violators or carelessness in routine inspections. For example, although the agency found some laboratories conducting tests improperly, you did not routinely look for improprieties. What are you doing to correct these deficiencies?

Mr. **Haley**. The deficiencies noted in the OIG audit of meat grading and certification, grade labeling, and advertising requirements have been corrected. The meat grading and certification program has increased the number of retail grade labeling reviews conducted and is assuring that observed violations have been corrected by strengthening follow-up reviews. We have also implemented additional requirements to properly document all instances where the graded product is reviewed at destination.

Mr. **Whitten**. An OIG audit of the Egg Products Inspection program recommended several actions to improve the effectiveness and efficiency of the program. Do you agree with the findings of this audit? What actions do you anticipate, if any, to address these recommendations?

Mr. **Haley**. There was one finding of the OIG audit for which AMS proposed an alternative solution to the OIG recommendation. OIG recommended that AMS assume food inspection responsibilities that were not within its legislative authority. AMS proposed instead to work closely with the Food Safety and Inspection Service, FSIS, of USDA and the Food and Drug Administration, FDA, to respond to OIG's concern that inefficiencies are occurring in the inspection of food products processed at official egg products plants. AMS cross-utilizes personnel with FSIS to the maximum extent possible where meat and poultry products are processed in the same plant with egg products. AMS will work with FDA on sanitation problems or other situations involving food products covered by the Food, Drug, and Cosmetic Act which are processed in egg products plants. These recommendations were accepted by OIG.

AMS has implemented specific actions to comply with other recommendations made by OIG to assure that egg inspection regulations and policies are promptly and consistently enforced.

To ensure the accuracy of tests performed by commercial laboratories to detect salmonella in egg products, AMS is developing a laboratory recognition program. The laboratories have been identified and specific information relative to their testing operations has been requested. AMS personnel will visit each laboratory annually to make an onsite inspection of their operations. We will ultimately initiate a check sample or split sample program to determine the laboratories' ability to detect salmonella. Since additional funding will be required and has been requested in the fiscal year 1991 budget, full implementation is scheduled for October 1990.

AMS is also revising its egg products sampling plan and has committed resources to address other problems cited in an AMS internal review.

Mr. WHITTEN. The number of egg handler surveillance visits decreased from 10,201 in fiscal year 1988 to 8,769 in fiscal year 1989 and your budget proposes to decrease these visits even further during fiscal years 1990 and 1991. You testified last year that the number of shell egg handling establishments is decreasing due to various reasons. What is happening in the egg handler business?

Mr. HALEY. For the past several years, the number of shell egg producers, packers, and handlers has steadily decreased. For many years, there has been a downward trend in egg consumption since each year fewer families have breakfasts which include eggs. Consumer concerns about cholesterol in egg products and the recent publicity relating Salmonella enteritidis to eggs has affected consumption, egg prices, and the profitability of the industry.

Mr. WHITTEN. I also note in your explanatory notes that egg product samples submitted for analysis for food chemistry and microbiology decreased by 5,512 in fiscal year 1989 over fiscal year 1988. In light of the problems with Salmonella enteritidis, why would this activity decrease?

Mr. HALEY. The number of food chemistry and microbiology laboratory samples listed in the AMS Explanatory Notes includes various other commodities such as turkey and related products in addition to egg products. The decrease in the number of samples analyzed from fiscal year 1988 to fiscal year 1989 was due primarily to a decrease in the volume of government procured poultry products.

AMS has increased its samples of commercially processed egg products by 12 percent, from 3,822 samples in 1988 to 4,279 in 1989. I would also like to point out that while Salmonella enteritidis has been shown to be a problem in shell eggs over the past few years, pasteurization is an effective means of destroying the organism. All inspected egg products must be pasteurized before entering consumer channels.

Mr. Whitten. Your budget request includes an increase of $1,104,000 to reduce the risk of foodborne disease outbreaks in the egg industry. How can you justify the need for this increase when you've testified that the number of shell egg handling establishments is steadily declining and both your egg products inspection and poultry and egg grading workload data show decreases from fiscal year 1988 to 1989 and project even further decreases in fiscal years 1990 and 1991?

Mr. Haley. It is true that the number of shell egg handling establishments is steadily declining; however, the amount of egg products inspected is steadily increasing. Due to a large commodity purchase program in 1988, the volume for that year was extraordinarily high. After several years of decreases in the number of egg products plants, the number of plants has stabilized and some increases are expected. However, with the heightened interest in food safety in recent months the consumer expects more from the Federal Government in the areas of monitoring of the food supply, research and evaluation of related health risks. The budget increase would address a number of food safety and public health issues pertaining to egg products.

The increase of $1,104,000 is needed to establish a microbiological surveillance program to determine if foodborne pathogens are potential problems in egg products; an improved chemical residue surveillance program to investigate and control the movement of potentially adulterated products; a methods development program to develop methods of rapid detection of chemical agents and microbiological pathogens; to provide adequate personnel to monitor the correction of deficiencies found during plant inspection reviews by AMS, and to evaluate the need for a Hazard Analysis Critical Control Points program to determine critical points for controlling identifiable hazards.

Mr. Whitten. What were the preliminary findings on a study being done by ARS to evaluate Light Spotted cotton grades versus White cotton grades?

Mr. Haley. The findings on the study performed by ARS to evaluate Light Spotted cotton grades and White cotton grades showed that differences in processing efficiency and product quality do indeed exist between Light Spotted and White cottons. A report of these findings was presented to the Secretary's Advisory Committee on Cotton Marketing at its meeting on August 30, 1989.

Mr. Whitten. How many staff were affected by the closing of the dairy products grading offices in Syracuse, Minneapolis and Fresno?

Mr. Haley. A total of 23 positions were directly affected by the closings. Five supervisors were downgraded and one supervisor was transferred within the grading organization. Seventeen clerks were either separated or able to find other employment opportunities within Federal service outside of the dairy grading program.

Mr. Whitten. Please provide a breakdown of your requested increase of $164,000 to offset increased operating costs.

[The information follows:]

	Amount
Travel	$29,000
Transportation of things	2,000
Rent, communication, and utilities	19,000
Printing	4,000
Other services	99,000
Supplies and materials	5,000
Equipment	6,000
Total	164,000

MARKET PROTECTION AND PROMOTION

Mr. WHITTEN. Under the Plant Variety Protection Act, AMS issues certificates of protection, similar to drug patents, which assure developers exclusive rights of novel varieties of sexually reproduced plants for 18 years. In fiscal year 1988 you had 264 applications backlogged and you stated it would take 1.2 years to process them. In fiscal year 1989 you had 267 backlogged applications which you say will take 2.2 years to process. Why will it take you an additional year to process almost the same number of applications? How much of a loss in income does this result in for the developer?

Mr. HALEY. The estimated times to process the fiscal year 1988 and the fiscal year 1989 application backlogs each were based on the processing rate of applications at that time. When the fiscal 1988 estimate was made, the Plant Variety Protection program had 4 full-time and 1 part-time experienced examiners working on all crops and the program had recently converted to a more efficient computer system which doubled the efficiency of examiners. At the time the 1989 estimate was made, 2 of these experienced examiners had retired and a third was resigning. With 3 of the 4 full-time examiners being new and inexperienced, it became apparent that it would require more time for these new examiners to become fully proficient in examining applications.

In addition, in the industry, the number of varieties being released was increasing faster than the number of descriptive characters available for differentiation.

The Department, the industry, and the Plant Variety Protection Board have reviewed procedures to improve efficiency. The Board, with the assistance of AMS made recommendations in the past which, when implemented, increased productivity significantly. However, the productivity increases have not been able to match the pace of the increasing number of varieties which are being released and protected. Other initiatives to speed processing of applications are being explored.

The loss in income resulting from delays in issuing certificates is expected to be relatively small since the applicant's variety is protected while an application is pending. This protection on pending applications provides protection similar to that of an issued certificate for the period of pendency at no additional cost to the applicant since the certificate provides 18 years' protection from date of issue.

The delay, however, does cost applicants who have requested their variety be "sold by variety name only as a class of certified seed". This is because the "certified seed only option" is enforced by the Federal Seed Act only after the certificate is issued. All enforcement prior to issuance is the responsibility of the applicant.

The delay in issuing certificates is a problem that has been discussed with the Board in connection with recommending fee increases. However, the Board has considered a lower cost of certificates more important than increased speed in processing applications.

Mr. WHITTEN. Please provide a breakdown of your requested increase of $19,000 to offset increased operating costs.

[The information follows:]

	Amount
Travel	$2,000
Rent, communication, and utilities	2,000
Other services	10,000
Supplies and materials	1,000
Equipment	4,000
Total	19,000

Mr. WHITTEN. How will the work you propose to do regarding pesticide levels in the food supply differ from what is currently being done by the Food and Drug Administration?

Mr. HALEY. The primary emphasis of the AMS program will be on the collection of data for preventive action and educational purposes, rather than for detection of residue violations, which, except for meat, poultry, and egg products, is the sole regulatory responsibility of FDA.

FDA conducts regulatory monitoring of domestic and imported foods with emphasis on allocating samples where known or potential problems exist. By contrast, the AMS program will be statistically-based and have a nonregulatory emphasis.

Information collected under the proposed AMS program will be shared with FDA to supplement and complement that agency's residue programs; for example, violations will be reported to FDA for follow-up action.

FDA's Total Diet Study, a "marketbasket-type" study, involves the collection and analysis of approximately 250 representative table-ready foods, many of which are combination foods containing several commodities. Residues found in these representative foods from the Total Diet Study cannot be associated with any specific agricultural commodity.

The proposed AMS program will supply statistically-based residue information on specific commodities and will provide objective pesticide residue information to our international trading partners in order to help prevent residue issues, no matter how minor from a public health perspective, from disrupting trade.

The AMS program will also provide sound, scientifically-based information, including both pesticide residue data as well as pesticide usage data, to the Environmental Protection Agency to enable improved regulatory decisions through: more realistic risk assessments, in part by using actual data to compare with theoretical worst-case scenarios; better evaluations of the benefits and risks from pesticide use, deeper understanding of regional consequences resulting from restrictions on pesticide use; and stronger justifications for actions to approve or revoke approvals for use of pesticides.

The recent National Academy of Sciences report "Improving Risk Communication—1989," stresses the importance of early, open, two-way communication on issues that affect people's lives. Pesticide use is one of those issues. The report also stresses the danger of delaying the process of information transfer until agencies feel that the information is complete. The consumer tends to equate a lack of information with a heightened sense of hazard. We would encourage the Department's use of existing USDA consumer education programs—the toll-free Meat and Poultry Hotline, the nationwide network of extension agents, and an extensive array of consumer publications to communicate to the consumers how common pesticides are used in agriculture, the level of pesticide usage, and the public health impact.

Mr. WHITTEN. Provide the Committee with a complete breakdown of the $15,816,000 you requested for pesticide residue testing.

Mr. HALEY. I will provide first year's costs for the record.

[The information follows:]

	Millions
A. Payment to States	$13.3
B. Program support costs	2.5
Total first year costs	15.8

A. *Payments to States ($13.3 million).* States will be asked to participate in the pesticide residue monitoring program. Emphasis will be placed on selecting States that have existing sampling programs. Funds will be provided to the States to modify these programs or to develop new ones that meet the Federal government's needs. This approach will minimize start up costs for the national program and enable more rapid collection and analyses of samples. Special efforts will be made to have samples collected as close as possible to the consumer level. Laboratory analyses will be performed by State laboratories with assistance from private laboratories depending on the particular State. Quality assurance provisions will be developed at both the State and Federal levels in order to ensure uniform and consistent laboratory operations. Once the national program is underway, the majority of any additional program funds will also be distributed to the States in order to increase State participation and to enable sampling coverage of more food commodities and residue compounds.

B. Program support costs

1. *Statistical Evaluation ($75,000).* Pesticide residue data that is supplied by the participating States will be reviewed and evaluated by statisticians within AMS. This review will determine what statistical inferences can be made using the data. In addition, this review will indicate where changes to the sampling procedures are needed in order to improve the statistical basis of the monitoring program.

2. *Data Management and Communication ($100,000).* Uniform data reporting formats and quality control procedures throughout the entire sampling, analytical, and data flow process are necessary to ensure the integrity and quality of the data. Processes will be instituted at the State and national level to assure the integrity and quality of the data. In addition, electronic data communication links will be established between the States and headquarters staff in AMS.

3. *Emergency Response ($100,000).* The pesticide residue monitoring program must be able to assist Federal and State efforts in responding to emergency situations involving real or perceived contamination incidents. Close coordination between USDA personnel and officials in other Federal, as well as State, agencies will provide rapid sample analyses and communication of test resuts. Monitoring results of importance to the incident at hand will be readily available to the appropriate officials. Procedures to address emergency situations will be established during the first year of the monitoring program.

4. *Quality Assurance ($175,000).* A quality assurance program for laboratories that perform analyses for the monitoring activity will help ensure the integrity of the program. It is expected that State Departments of Agriculture laboratories will participate in sample analyses. A quality assurance program will help to establish consistency of laboratory operations so that results from other participating State lab-

oratories will have the same degree of credibility. An effective quality assurance program will require onsite laboratory visits and periodic check sample analyses.

5. *Methods Development and Evaluation ($250,000).* The analytical capability of these monitoring programs will keep pace with technological developments for laboratory procedures, as well as meet the challenges to develop methods to analyze for new residue compounds. The methods will: (1) take no more than 2 to 4 hours of analytical time per sample, (2) have a minimum proficiency level at or below the tolerance, (3) have a quality assurance plan developed for the method, (4) be successfully validated through an interlaboratory study and acceptable to the scientific community.

The need for improved methods arises from constraints on existing methods used today in the following areas:

Coverage: the ability to test for all significant pesticides.

Resources: the availability of sufficient resources (e.g., personnel, instrumentation, and laboratory facilities) necessary to test for all significant pesticides.

Confirmation: the ability to verify that a residue exists.

Regulatory action: the ability to analyze samples in a timely manner so that violative commodities can be stopped before they reach the marketplace.

Metabolites, new pesticides, and inert ingredients: the ability to test for pesticide metabolites and breakdown products, for new pesticides having different characteristics than those analyzed using existing methods, and for significant inert ingredients (if determined necessary).

Analytical methods exist today to analyze each pesticide residue on the food for which a tolerance has been established. Few single residue methods are suitable for everyday monitoring of the food supply for several reasons: a large number of pesticides are commercially available, more than one pesticide is commonly applied to a particular commodity, a pesticide residue may occur on a commodity for which the commodity has no tolerance, and Federal and State regulatory laboratories work with samples whose pesticide history is unknown.

To maximize coverage with given resources, AMS and State laboratories must rely on multiresidue methods for the majority of their analyses. Methods development research activities are needed to expand the number of pesticides and commodities that can be analyzed.

6. *Hardware, Software, and Systems Development ($1.3 million).* An information system is required to effectively and efficiently record, transcribe, store, and access the data that will be generated by the monitoring program. Developmental costs, as well as hardware and software acquisition costs, are necessary. The information system, once implemented, will become a critical component in the monitoring program. System maintenance and upgrade provisions will be necessary in subsequent years of the program's operations.

7. *Administrative and Scientific Support ($500,000).* During the first year of operation, a staff will be formed in AMS to oversee the monitoring program. As the program develops and expands by the addition of more States and residue and product parings, additional staff will be needed.

Mr. WHITTEN. In your testimony you state that, under the proposed pesticide residue monitoring program, states will sample and test commodities within market distribution channels for pesticide residues. Have the states agreed to participate in this program? Which states have agreed and which have not?

Mr. HALEY. Presently, we are contacting the State Departments of Agriculture in New York, California, Texas, Michigan, Florida, and Washington concerning their participation in the food safety data initiative. Since the funding issue has yet to be resolved, we have not made any firm commitments with the States.

WHOLESALE MARKET DEVELOPMENT

Mr. WHITTEN. What were the results of a research report published concerning farmers' market development in the Piedmont area of South Carolina?

Mr. HALEY. AMS, Clemson University, the South Carolina Department of Agriculture, and the South Carolina Agricultural Statistics Service conducted a cooperative study of the potential need for a new farmers' market/wholesale facility to serve upstate South Carolina. The study, "Feasibility of Establishing a Wholesale Farmers' Market in Upstate South Carolina," was published in December 1988. It concluded that a need for additional facilities existed, which could best be met by expanding the existing Greenville State Farmers' Market at Greenville, South Carolina. Facility plans for such an expansion were included in the publication.

Mr. **Whitten**. Please update the Committee on the continuing market center project in New York State dealing with the potential applications of central refrigeration technology on wholesale food centers.

Mr. **Haley**. AMS is conducting a joint study with the New York Department of Agriculture and Markets concerning the feasibility and technical aspects of using a central source of refrigeration to serve all of the food wholesale and processing firms on a modern wholesale food center. System designs, including a metering scheme, have been completed. The final stages of the project will include comparisons of investment and operating costs of such a central system with equivalent costs associated with individual refrigeration installations. A report is expected to be completed during fiscal year 1990. Results of the study can be applied to the design of new food centers nationally. This research is part of a continuing effort to apply the latest design technology into wholesale food center studies.

Mr. **Whitten**. The fiscal year 1990 Conference Report included language, and I quote, "The conferees will expect the Department to initiate market development studies on the Chicago and Maine Terminal Markets and to continue work on the Columbia, South Carolina, project." What is the status of these projects?

Mr. **Haley**. Work has been initiated on each of the three projects mentioned in the 1990 Conference Report. AMS has held planning meetings with Chicago city officials and industry representatives to define an initial study area involving firms in or near the Fulton, South Water and Randolf Markets. Researchers have tentatively identified 514 food firms maintaining facilities in this study area. Survey forms are being finalized, and a combined AMS/Chicago survey team will initiate field work after additional planning and training sessions.

AMS staff met with State marketing officials to outline the scope and objectives of the Maine Terminal Market project. An agreement was reached to initially concentrate on the identification of additional facilities needed for first stage processing and assembly of Maine agricultural products. Subsequent project phases could include developing conceptual designs for new wholesale food distribution facilities to accommodate increased trade resulting from the United States-Canada Free Trade Agreement. Specialists are assembling a tentative list of the wholesale food firms with facilities in the State.

Planning meetings are underway with the South Carolina Department of Agriculture and other officials concerning the evaluation of a new agribusiness center at Columbia. As part of this effort, AMS has assembled an initial list of the food wholesale food firms maintaining warehouse or processing facilities in the State.

PAYMENTS TO STATES AND POSSESSIONS

Mr. WHITTEN. Please provide for the record a list including funding, participating state, and a brief description of each of the projects approved during fiscal year 1989.

[The information follows:]

FEDERAL-STATE MARKETING IMPROVEMENT PROGRAM

[Payments to States and Possessions]

States	Projects	Amount
Alabama	A consumer education program to update the skills of consumers and expose them to the advantages of purchasing produce from farmers' markets.	$30,000
Arkansas	A project to test different juices of non-traditional varieties of grapes grown in Arkansas, in order to utilize the percentage of grapes that do not meet fresh grape standards.	47,445
Colorado	Development of lamb classification systems to facilitate marketing based on lean content of the carcass.	100,000
Florida	A project to develop a microcomputer market information system that will allow users to directly retrieve market news on selected commodities by voice or computer.	50,000
Idaho	A project to conduct marketing studies to determine perceptions of trout distributors, retailers, and restaurant managers about consumer preferences.	60,000
Kansas	A project to develop a pilot market news system centered around the Pratt Auction Market, focusing on the feasibility of reporting the other large markets in the State.	15,000
Kansas	A project to study the potential and existing markets to determine if there is sufficient product base to justify investment in intermodal facilities.	15,000
Kentucky	A study to evaluate the market impact of graded hay and to identify price differentials between graded and ungraded product and to develop an information program.	26,744
Louisiana	A project to develop technical and educational materials on the uses and merits of pine straw for landscaping, etc.	20,000
Maryland	A study to analyze the Atlantic Region potential for sales through food service markets, developing marketing guides and training programs, involving the States of Maryland, Virginia, and West Virginia.	70,000
Maryland	A project to coordinate DELMARVA shore-to-store produce with the intent to expand the amount of shelf space used in local markets.	16,934
Massachusetts	Five separate projects involving the direct marketing of Massachusetts agricultural products: (1) The Worcester Farmers' Market; (2) Pioneer Valley Growers Association; (3) Springfield Farmers' Market; (4) Western Massachusetts Food Industry Association; and, (5) Central and Northern Berkshire Farm Produce Map.	87,595
Michigan	A study to analyze the juice market, develop and test formulations, conduct feasibility analyses, and placement of the imbalance in supply and demand of tart cherries.	60,000
Missouri	A continuation of an alternatives center to provide information to Missouri producers on alternative enterprises.	45,000
Nebraska	An international market study for beef breeding cattle and swine to determine the scope and size of potential markets and sources of marketing assistance.	56,000
New Jersey	A study to develop computerized procedures and techniques for handling data for produce sales and payments for Landisville Fruit Growers Cooperative.	23,850
North Dakota	A project to conduct market studies to determine current ethanol consumption, production costs, problem areas, and public perception, in order to develop programs to meet the needs of the industry.	34,400
North Dakota	A project to identify and transport Northern Plains barley	29,044
Texas	Project to study relationships between HVI measurements and yarn/fabric properties	47,320
Vermont	This project involves three areas: (1) The expansion of a field-grown cut flower market; (2) expansion of organically-grown vegetables for processing; and, (3) the need to develop meaningful data on the cost of natural/organic poultry production vs. conventional production.	15,000
Virginia	A project to identify sales techniques and programs currently being used by producers and marketing cooperatives engaged in local sales of lambs.	39,546
Wyoming	A project to measure the amount of force required to pull the pelt from legs of ram and wether lambs at different ages and at different seasons of the year.	23,122

FEDERAL-STATE MARKETING IMPROVEMENT PROGRAM—Continued

[Payments to States and Possessions]

States	Projects	Amount
Wyoming	A project to prepare and analyze wool samples from a variety of sources using an image analysis system.	30,000
Total		942,000

Mr. WHITTEN. What percentage of costs were covered by the states in these projects?

Mr. HALEY. While we look for a minimum dollar for dollar match, the States contributed 58 percent of the costs of projects funded in fiscal year 1989

PAYMENTS TO STATES OBLIGATIONS

Mr. WHITTEN. Please update the tables that appear on pages 512 and 515-516 of last year's hearing record to include fiscal year 1989.

[The information follows:]

PAYMENTS TO STATES AND POSSESSIONS—OBLIGATIONS BY GEOGRAPHIC AREA—FISCAL YEARS 1984-89

State	1984	1985	1986	1987	1988	1989
Alabama			$25,000			$30,000
Alaska				$15,000		
Arkansas						47,445
Colorado		$105,000	25,500	40,000	$40,000	100,000
Connecticut	$55,000					
Florida		121,385				50,000
Georgia	50,000					
Guam	40,000					
Idaho			40,000	70,000	59,200	60,000
Illinois	142,500			35,000		
Indiana			30,000		60,000	
Iowa	100,000	73,468	127,500	16,000		
Kansas	5,500				50,000	30,000
Kentucky			58,478	59,107		26,744
Louisiana						20,000
Maine	38,000	32,000	150,000			
Maryland						86,934
Massachusetts		50,000	60,000	40,000	15,000	87,595
Michigan						60,000
Mississippi	75,000	75,000		30,000		
Missouri	66,390				40,000	45,000
Montana		63,800		55,000		
Nebraska			120,100		93,785	56,000
New Jersey	77,800	44,323		70,000		23,850
New York		66,466	127,677	44,952		
North Dakota	86,600	67,400	40,000			63,444
Oklahoma	15,000	80,578	65,000	75,000	80,000	
Oregon					20,000	
South Carolina	125,735		32,745			
Tennessee			40,000			
Texas		35,000		130,000	347,925	47,320
Utah	44,475					
Vermont				50,000		15,000
Virginia		96,128		125,750	45,000	39,546

PAYMENTS TO STATES AND POSSESSIONS—OBLIGATIONS BY GEOGRAPHIC AREA—FISCAL YEARS 1984–89—Continued

State	1984	1985	1986	1987	1988	1989
Washington	78,000	75,000		60,000	75,000	
Wyoming					16,090	53,122
Total	1,000,000	985,548	942,000	915,809	942,000	942,000

OFFSET
CAMERA COPY

FEDERAL-STATE MARKETING IMPROVEMENT PROGRAM

5-YEAR TABLE LISTING CONTRIBUTIONS AND THE MATCHING NON-FEDERAL PORTION

STATE	1985 FEDERAL	1985 NON-FEDERAL	1986 FEDERAL	1986 NON-FEDERAL	1987 FEDERAL	1987 NON-FEDERAL	1988 FEDERAL	1988 NON-FEDERAL	1989 FEDERAL	1989 NON-FEDERAL
Alabama			$25,000	$25,000					$30,000	$30,000
Alaska					$15,000	$15,000				
Arkansas									47,445	47,445
Colorado	$30,000	$30,000	25,500	25,500						
Colorado	75,000	75,000			40,000	65,000	40,000	50,500	100,000	200,000
Florida	102,000	103,800								
Florida	19,250	19,250							50,000	50,000
Idaho			40,000	111,500	70,000	153,360	59,200	59,200	60,000	84,893
Illinois					35,000	39,000				
Indiana			30,000	30,000			60,000	81,600		
Iowa	73,468	101,104	127,500	917,400	16,000	18,900				
Kansas									15,000	15,000
Kansas							50,000	78,000	15,000	15,000
Kentucky			58,478	69,000	59,107	66,700			26,744	26,744
Louisiana									20,000	30,000
Maine	32,000	32,000	150,000	150,000						
Maryland									16,934	16,934
Maryland									70,000	70,000
Massachusetts	50,000	75,000	60,000	112,500	40,000	115,000	15,000	20,950	87,595	87,595
Mississippi	75,000	75,000			30,000	37,125				
Michigan									60,000	125,000
Missouri							40,000	78,100	45,000	76,200
Montana	63,800	94,800			55,000	55,000				
Nebraska			120,100	201,708			53,900	117,840	56,000	103,200
Nebraska							25,050	26,350		
Nebraska							14,835	65,000		
New Jersey	44,323	44,323			70,000	79,000			23,850	23,850
New York	66,466	66,466	77,677	77,677	44,952	44,952				
New York			50,000	50,000						
North Dakota	67,400	73,400	40,000	94,600					29,044	29,044
North Dakota									34,400	34,400
Oklahoma	80,578	80,578	65,000	65,000	75,000	143,067	80,000	143,445		
Oregon							20,000	30,000		

FEDERAL-STATE MARKETING IMPROVEMENT PROGRAM

STATE	1985 FEDERAL	1985 NON-FEDERAL	1986 FEDERAL	1986 NON-FEDERAL	1987 FEDERAL	1987 NON-FEDERAL	1988 FEDERAL	1988 NON-FEDERAL	1989 FEDERAL	1989 NON-FEDERAL
South Carolina			20,245	20,245						
South Carolina			12,500	12,500						
Texas	35,000	35,000	40,000	40,000	130,000	433,658	130,000	395,058		
Texas							50,000	105,752		
Texas							50,000	227,056		
Texas							75,000	88,000		
Texas							42,925	93,250	47,320	47,500
Vermont					50,000	50,000			15,000	15,000
Virginia	96,128	117,794			48,000	62,200	45,000	99,000	39,546	39,546
Virginia					77,750	90,942				
Washington	75,000	75,000			60,000	72,500	75,000	98,000		
Wyoming							16,090	16,090	23,122	23,122
Guam									30,000	30,000

TOTALS:

1985	-	Federal	$ 985,413	1988	-	Federal	$ 942,000
		Non-Federal	1,098,515			Non-Federal	1,873,191
1986	-	Federal	942,000	1989		Federal	942,000
		Non-Federal	2,002,630			Non-Federal	1,220,473
1987	-	Federal	915,809				
		Non-Federal	1,541,404				

PERISHABLE AGRICULTURAL COMMODITIES ACT FUND

Mr. Whitten. In looking at your workload data on page 16-25 of the explanatory notes, why do you anticipate an increase of over 30 percent in Statutory Trust actions?

Mr. Haley. At the time we prepared those tables, we anticipated an increase of 14,000 filings in fiscal year 1990, which would have been equivalent to a 14 percent increase over fiscal year 1989 and a 30 percent increase over 1988. Since the 1984 amendment to the Perishable Agricultural Commodities Act gave suppliers an extra measure of financial protection, there has been a steady increase in the number of trust filings each year. After the initial influx of filings in the first few years of the program, the program is in a leveling off period. Based on trust filings from October 1989 through February 1990, we project that there will be an increase of only 8 percent this fiscal year.

Mr. Whitten. An amendment to the Act required the Secretary to establish an industry advisory committee. Please provide a list of all members of this committee and a brief description of what they hope to accomplish.

Mr. Haley. The committee's mission was to provide an in-depth review of the Perishable Agricultural Commodities Act program and its impact on the marketing of fresh and frozen fruits and vegetables in the United States. The list of committee members and alternate members will be provided for the record.

[The information follows:]

PACA Industry Advisory Committee members and company affiliation

Stephen B. Barlow, Barlow Foods.
Gerald A. Carter, Dugan/Doss, Inc.
Ira J. Cohen, Shapiro & Cohen, Inc.
Stephen A. D'Arrigo, D'Arrigo Bros. Co. of New York, Inc.
Keith W. Eckel, Fred W. Eckel Sons.
Darrel E. Fulmer, Pandol Bros. Inc.
John A. Ielmini, Patterson Frozen Foods, Inc.
David O. Kingston, Kingston Produce Co., Inc.
David W. Long, Harvest Fresh Produce, Inc.
John J. Mandy, United Apple Sales, Inc.
Anthony P. Misasi, Grand Union Company.
John R. Norton III, J.R. Norton Company.
Daniel G. Seitz, Jr., Valley Fruit & Vegetable Co., Inc.
Alan L. Siger, Consumers Produce Co., Inc., of Pittsburgh
Richard G. Spezzano, Vons Companies, Inc.
James A. Stoll, Bag-n-Save Foods, Inc.
Frank D. Teets, South Bay Growers, Inc.
Charles E. Tryon, Super Valu Stores, Inc.
Daryl (Sid) R. Verdoorn, C.H. Robinson Company
Louis E. Wysocki, Wysocki Farms, Inc.
Peter C. Ballotta, The Tobi Company, Inc.
William F. Geach, Blue Anchor, Inc.
Gwen C. Gray, Cash Farms, Inc.
Robert G. Hand, Dahl's Foods
Richard H. Jahnke, Wetterau, Inc.
Joseph D. Obucina, Jr., A. Duda & Sons, Inc.
Wilson J. Purdy, Jr., Giant Food, Inc.
Frank R. Rostan, Jr., Wakefern Food Corp.
Todd Saine, Duckwall-Pooley Fruit Company, Inc.
Preston C. Williams, Jr., Southern Frozen Foods.

SECTION 32

Mr. WHITTEN. Please provide, for the record, the table that appears on pages 17-4 and 17-5 of the explanatory notes showing section 32 purchases for fiscal years 1988 and 1989.

Mr. HALEY. I will provide that information.

[The information follows:]

SECTION 32 COMMODITY PURCHASES, 1988 AND 1989

[In thousands]

Item	1988 actual—		1989 actual—	
	Pounds	Obligations	Pounds	Obligations
Apple juice, canned	37,111	$9,422		
Apple slices, canned	12,372	5,133		
Apples, fresh	7,741	1,387	8,135	$1,867
Applesauce	52,378	12,898	26,116	7,605
Apricots, canned			10,146	5,301
Beans, dry	12,006	2,449	17,055	5,164
Beans, green, canned			15,172	5,672
Beans, green, frozen			1,743	961
Beans, refried, canned	5,220	1,402	4,066	1,337
Beans, vegetarian	14,475	2,680	11,060	2,535
Beef, boneless, frozen	1,260	1,427	252	298
Beef, bulk, frozen, ground	103,974	119,412	86,083	103,058
Beef, canned	288	403	688	1,059
Beef patties	26,635	27,835	15,582	17,143
Blackberries, frozen	624	419	1,865	1,185
Cherries, red, frozen	18,364	6,801	13,452	6,388
Chicken, breaded			468	518
Chicken, bulk, chilled	1,938	1,106		
Chicken, frozen, cut-up	35,539	20,763	41,598	26,951
Chicken, patties	2,242	2,880		
Chicken, whole, frozen			4,859	2,865
Corn, canned	14,059	3,793		
Corn, frozen	3,468	1,496		
Date pieces	6,105	4,800	3,300	2,258
Egg mix	3,944	4,998		
Eggs, whole, frozen	21,607	9,991		
Figs, dried	2,001	2,031	2,001	1,773
Ham, cooked, frozen	4,619	6,939	14,494	19,846
Luncheon meat	756	1,026	324	428
Mixed fruit, canned	12,530	5,913	9,324	4,689
Mixed vegetables, frozen	13,704	4,546		
Peaches, canned	14,915	6,836	518	246
Peaches, frozen, diced			1,218	597
Peaches, frozen, sliced			9,496	4,614
Peaches, frozen	573	324	6,669	3,889
Pears, canned	38,936	15,187	3,969	1,684
Pears, canned, halves			13,463	5,700
Pears, canned, diced			7,903	3,301
Pears, canned, sliced			8,418	3,595
Pears, fresh	7,760	2,193	11,155	2,684
Peas, canned			9,730	4,428
Pineapple, canned	18,153	7,247		
Pineapple, canned, chunks			6,898	2,578
Pineapple, canned, crushed			424	181
Pineapple, canned, tidbits			16,486	6,163
Plums, canned	3,699	990		
Pollock nuggets, frozen	10,433	12,719	13,672	15,751
Pork, boneless, frozen			42	40
Pork, frozen, ground	33,816	33,524	31,335	29,586
Potato rounds, frozen	51,860	15,872		

SECTION 32 COMMODITY PURCHASES, 1988 AND 1989—Continued

[In thousands]

Item	1988 actual—		1989 actual—	
	Pounds	Obligations	Pounds	Obligations
Potatoes, french fries	74,887	20,928		
Potatoes, sweet, mashed	832	183		
Potatoes, sweet, syrup pack	6,854	1,945		
Prunes, dried	12,954	7,803	3,827	2,713
Raisins	7,449	4,870		
Tomatoes, canned	7,494	2,790		
Tomatoes crushed, canned	12,591	4,511		
Tomato paste	4,621	2,315		
Tuna, canned	7,185	9,884	5,262	7,172
Turkey, chilled	3,744	1,747	8,654	5,491
Turkey, frozen, ground			3,825	2,635
Turkey, roast	19,026	21,056	10,163	14,476
Turkey, whole, frozen	10,547	6,564	9,940	6,846
Walnuts, English	4,273	6,570	3,991	6,158
Miscellaneous	(60)	(13)		
Total	767,502	447,995	474,841	349,429

Mr. WHITTEN. What is the status of the four requests last year for a new program, one under the Fluid Milk Orders program and three under the Fruit, Vegetable and Speciality Crop Orders program?

Mr. HALEY. A recommended decision adopting a Federal milk order for the Carolina marketing area, which includes the States of North Carolina and South Carolina, was issued March 21, 1990.

The request for a Vidalia onions marketing order was approved under referendum by 100 percent of the producers on September 13-15, 1989. The order, which had been effective on an interim basis since March 16, 1989, was issued as a final order on February 8, 1990.

The Texas-New Mexico potatoes marketing order will be terminated on May 31, 1990. Only 42 percent of the growers who voted in a November 6-27, 1989, continuance referendum favored continuing the order which had been in effect since June 2, 1989. Those voting represented 30 percent of the volume of potatoes produced. As required by the Agricultural Marketing Agreement Act of 1937, the Department has notified both Congressional Agriculture Subcommittees of the decision to terminate the order. Upon expiration of the required 60-day notice period on April 14, 1990, the Department will issue a termination order.

A proposal for a marketing order for seedless European cucumbers grown in the United States was published in the Federal Register on October 13, 1989. The resulting 10 written exceptions received are currently being reviewed.

Mr. WHITTEN. According to your explanatory notes, investigations of alleged violations under the Fruit, Vegetable and Specialty Crop Orders program increased almost 50 percent, from 43 in fiscal year 1988 to 80 in fiscal year 1989. You project these investigations to increase even further, to 120, in fiscal year 1990. Why?

Mr. **Haley**. The increased level of investigations in fiscal years 1990 and 1991 is the Department's estimate of cases which marketing order administrative committees will refer to the Department for enforcement action, including field investigation by the Department. The significant increase is due to several factors. I will provide a list of these factors for the record.

[The information follows:]

(1) Marketing order administrative committees have in recent years stepped up their level of compliance activities. This includes more frequent auditing of handlers as well as the implementation of other activities to detect marketing order violations (e.g., "controlled buys" of uninspected produce). As a result, the committees have greatly increased their referrals of alleged violations to the Department and have on numerous occasions expressed their concern that the Department must take a more vigorous role in promptly investigating those referrals and, if appropriate, prosecuting the violators.

(2) The 1988 amendment to the Agricultural Marketing Agreement Act of 1937, which authorized civil penalties for marketing order violations (with the exception of nonpayment of program assessments), is expected to result in increased referrals of violations.

(3) In response to the marketing order administrative committees, the Department has increased its resources to meet the increased case load. For example, the AMS compliance staff has conducted a number of investigations and field audits, and recently has decided to permanently station a full time auditor in California to investigate marketing order violations. Also, the California regional office of the Office of General Counsel has hired an additional attorney to work on marketing order violations.

(4) We believe that there has been an absolute increase in the number of violations. Possibly, this increase in investigations is due to an increased number of litigation and adjudicatory actions against only a few individuals who are regulated under marketing orders but oppose specific marketing orders on philosophical or other grounds.

Mr. **Whitten**. The Secretary authorized assistance to producers of apples through diversion of about 58 million pounds destined for food banks and livestock feed. What was the cost to the Department as a result of this initiative?

Mr. **Haley**. There were 58,896,580 pounds of apples delivered to authorized outlets at a cost to the Department of $9,635,051. The primary recipients were charity groups such as food banks. Distribution was also authorized to outlets for the purpose of ethanol production, livestock feeding, and manufacture of apple juice concentrate.

Mr. **Whitten**. The Section 32 estimate on page 17-3 of the notes indicates an appropriation level of $5,068,142,328. Since the notes were prepared has there been a change in this estimate? If so, please update the table to reflect any new estimate.

Mr. **Haley**. Yes, sir, there has been a change in the estimates. I will provide a table for the record.

[The information follows:]

OBLIGATION LEVELS

[On basis of available funds]

Item	1991 estimated	1991 current estimate
Appropriation or estimate	$5,068,142,328	$5,142,532,504
Unobligated balance available, start of year	291,113,672	289,820,572
Total available	5,359,256,000	5,432,353,176

OBLIGATION LEVELS—Continued

[On basis of available funds]

Item	1991 estimated	1991 current estimate
Less transfers to:		
Food and Nutrition Service, Child Nutrition Programs	−4,632,259,000	−4,696,501,000
Department of Commerce	−61,900,000	−70,755,412
Total transfers	−4,694,159,000	−4,767,256,412
Total available after transfers	665,097,000	665,096,764
Less total obligations	[1] −365,097,000	[1] −365,097,000
Unobligated balance available, end of year	300,000,000	299,999,764

[1] Under proposed legislation, total obligations in FY 1991 will be decreased to $356,828,000

Mr. **Whitten**. You are requesting an increase of $256,000 to cover 50 percent of the 1991 pay raise. This figure does not include any funding for the 1989 pay raise. Why aren't you requesting any additional funding for the 1989 pay raise when the rest of USDA agencies are?

Mr. **Haley**. We are able to absorb the cost of the fiscal year 1989 pay raise. However, any subsequent pay raises will need to be funded in order to maintain our current level of operations.

Mr. **Whitten**. Please explain in further detail the data system being developed to integrate AMS with the Food and Nutrition Service and the Agricultural Stabilization and Conservation Service.

Mr. **Haley**. The Processed Commodities Inventory Management System, PCIMS, will provide one integrated system for all three agencies to track surplus commodities from the initial contract through storage to final distribution throughout the school lunch program and other feeding programs. Each of the three agencies will update this integrated system as to their respective activities thereby ensuring that the resulting output will be consistent and timely.

Mr. **Whitten**. What are these other two agencies doing to contribute to this initiative?

Mr. **Haley**. The system is being developed through an ASCS contract with Arthur Andersen & Company. Arthur Andersen, with the assistance of ASCS and AMS staff, designed and programmed the system. All three agencies have performed extensive testing of the system. Once the system is completed, it will be approximately 70 percent ASCS and 15 percent each AMS and FNS.

Mr. **Whitten**. What is the total cost of the system going to be?

Mr. **Haley**. The total contractor cost to develop the system is estimated at $40 million. An additional cost of $12 million is estimated for the system life.

Mr. **Whitten**. When will the system be fully operational?

Mr. **Haley**. Acceptance testing for the complete system including the AMS, ASCS, and FNS portions is currently taking place and will continue until the implementation of the full tri-agency system. Implementation of the ASCS portion is scheduled for November 1990, and will be phased in over several months. Implementation of the FNS portion is being planned.

Mr. **Whitten**. What type of contractor support will be needed?

Mr. **Haley**. A maintenance support contract will be needed once system development is completed.

MARKETING AGREEMENTS AND ORDERS

Mr. **Whitten**. Provide an object class breakdown of the $352,000 requested to improve the administration of Marketing Agreements and Orders program.

[The information follows:]

Marketing Agreements and Orders Program Increase

Object classification	Amount
Personnel compensation:	
11.1 Full-time permanent	257
11.3 Other than full-time permanent	2
11.5 Other personnel compensation	2
11.9 Total personnel compensation	261
12.1 Civilian personnel benefits	58
21.0 Travel and transportation of persons	4
23.1 Rental payments to GSA	3
23.3 Communications, utilities, and miscellaneous charges	7
24.0 Printing and reproduction	7
25.0 Other services	10
26.0 Supplies and materials	1
31.0 Equipment	1
Total	352

EXPORT PROGRAMS

Mr. **Whitten**. Your fiscal year 1991 budget proposes to eliminate the sunflower and cottonseed oil export program. This is the only program that has used Section 32 funds since 1973, as it was originally intended to be used. Do you have other commodities in mind that you plan to export using Section 32 funds in fiscal year 1990? If not, why not?

Mr. **Haley**. At this time, no other commodities have been identified for export using Section 32 funds. We have had difficulty finding markets where Section 32 funding assistance would increase overall exports. Many foreign buyers simply substitute Section 32 assisted exports for already planned commercial purchases of U.S. commodities thus resulting in no change in the level of U.S. exports. In other cases, subsidies to expand market shares are offset by an increase in our competitors' export subsidies. As you know, the Department is using a variety of other programs to expand exports despite the problem of others using export subsidies in certain instances.

As directed by the 1990 Appropriations Act, the Department has undertaken a study concerned with developing plans for using Section 32 funds in exporting commodities and/or other steps which could modify the use of Section 32 funds and the operation of CCC to maintain U.S. export shares. The results from that study may be useful for future decisions on the use of Section 32 funds for export. The study is expected to be completed by the end of the fiscal year.

EMERGENCY SURPLUS REMOVAL AND DISASTER RELIEF

Mr. **Whitten**. Please provide the amounts expended for emergency surplus removal and disaster relief for the last 10 years.

[The information follows]:

Emergency Surplus Removal

[In thousands of dollars]

Fiscal years:	*Amounts*
1980	$93,733
1981	6,699
1982	48,290
1983	75,437
1984	99,191
1985	58,111
1986	44,122
1987	12,054
1988	98,325
1989	7,359

Disaster Relief

[In thousands of dollars]

1980	None
1981	None
1982	None
1983	None
1984	None
1985	None
1986	None
1987	None
1988	$3,253
1989	None

BUDGET REQUEST

Mr. WHITTEN. Please provide, for the record, a table showing the fiscal year 1991 budget request submitted to the Department, the Department's recommendation to OMB, and the OMB allowance, by program.

[The information follows:]

FISCAL YEAR 1991 AMS BUDGET REQUEST

[In thousands of dollars]

	Agency's request to department	Department's recommendation	OMB allowance
Marketing Services:			
Market news	17,694	17,694	17,694
Egg products inspection	11,241	11,241	11,241
Standardization	3,895	3,895	3,895
Wholesale market development	1,684	1,684	1,684
Market protection and promotion	1,921	17,737	17,737
Total, marketing services	36,435	52,251	52,251
Payments to States and possessions	942	942	942
Total agency	37,377	53,193	53,193

Mr. WHITTEN. Provide a sub-object class breakout for Other Services for fiscal years 1989, 1990, and 1991.

[The information follows:]

[In thousands of dollars]

	1989	1990	1991
Cooperative agreements	$2,600	$2,655	$16,125
Contracts	650	650	693
Payments to other Government agencies	500	500	533
Miscellaneous payments	358	358	381
Total	4,108	4,163	17,732

LIMITATION ON ADMINISTRATIVE EXPENSES ACCOUNTS

Mr. **Whitten**. For the record, please provide an object classification table for fiscal years 1989, 1990, and 1991 for the amounts covered by the limitation on administrative expenses account.

[The information follows:]

ADMINISTRATIVE EXPENSE LIMITATION—OBJECT CLASSIFICATION

[In thousands of dollars]

	Fiscal year		
	1989 actual	1990 estimate	1991 estimate
Personnel compensation:			
11.1 Full-time permanent	10,214	12,216	13,115
11.3 Other than full-time permanent	5,587	4,994	5,386
11.5 Other personnel compensation	1,428	1,228	1,318
11.9 Total personnel compensation	17,229	18,438	19,819
12.1 Personnel benefits: Civilian	2,677	2,730	2,931
13.0 Benefits for former personnel	1,289	1,492	1,543
21.0 Travel and transportation of persons	3,411	3,675	3,700
22.0 Transportation of things	492	632	675
23.1 Rental payments to GSA	302	270	320
23.2 Rental payments to others	2,050	2,089	2,200
23.3 Communications, utilities, and miscellaneous charges	2,357	3,621	3,800
24.0 Printing and reproduction	122	53	55
25.0 Other services	3,105	3,182	3,141
26.0 Supplies and materials	740	858	978
31.0 Equipment	971	922	1,000
32.0 Lands and structures	7		
42.0 Insurance claims and indemnities	21		
43.0 Interest and dividends	3		
99.0 Total obligations	34,776	37,962	40,162

Mr. **Whitten**. What percentage of the imported tobacco is certified to be within pesticide residue tolerances by the importer?

Mr. **Haley**. Fifteen percent of all the tobacco imported into the United States has been certified to be within pesticide residue tolerance.

Mr. **Whitten**. Of the tobacco that has exceeded tolerance levels, what percentage has come from self-certified shipments?

Mr. **Haley**. Of the half billion pounds imported since the inception of the self-certification program, only 500,000 pounds have failed to meet tolerance levels. About 86 percent of those pounds that failed were self-certified. Beginning in 1987, the sampling rate for self-certified imported tobacco was increased from one sample per 250,000 pounds to one sample per 100,000 pounds in order to reduce violations. In addition, any shipment containing even one sample that violates tolerance requirements is rejected in total. Since these measures were instituted, only one shipment has been found in violation.

Mr. **Whitten**. Mrs. Smith?

FOOD SAFETY

Mrs. **Smith**. I thank you, Mr. Chairman.

Welcome back to all of you. Assistant Secretary Smith, we are so glad to have you here again. Mr. Haley, it is good to see you. I appreciated your stopping at my office.

I agree with you, Secretary Smith, that I believe we have a very safe food supply but I also think that we do need to increase the perception that we have of the safe food that we do have.

Now, I note that the President has asked for a $24 million increase; that brings your budget up to $205 million, and $15 million of that is for the program for food safety. Could you just tell us very briefly why you feel that the Food Safety Program is needed?

Mr. **Haley**. I think everyone agrees—and I mean everyone in the agricultural and environmental community, including the EPA, FDA, and growers—that there is a void in the data relating to actual pesticide exposure risk. We do not have data on residue amounts or how dangerous those amounts are. Our Food Safety Initiative would provide that data for the first time. We also hope to infuse that data back into the EPA's risk assessment so that better and more accurate decisions can be made in regards to banning pesticides, registering pesticides, and so forth.

FOOD SAFETY COORDINATION

Mrs. **Smith**. Thank you. And would you comment about what coordination you have been having between USDA, EPA, and FDA regarding this program?

Mr. **Haley**. I would be happy to do that. At the very outset of our planning on this program, we called FDA and EPA to propose a meeting to discuss whether this type of information would be useful to them. We are very cognizant of the fact that it is no good gathering data unless it is going to be legitimately useful. We convened a meeting with their top policy people. As a result, they appointed a technical group of scientists and toxicologists from both FDA and EPA who are working with my scientific staff to develop the protocols of sampling procedures—the laboratory methodologies. We hope to have a coordinated program here with across the board support of grower groups and environmental groups.

MARKET NEWS

Mrs. **Smith**. Just one further question. The President also asked for $1.3 million to develop and modernize the Marketing News Program. I know that is designed to assist the users and growers and marketers in making good marketing decisions. Has this program really been successful, and what modernization is being sought?

Mr. **Haley**. I can't think of any program that we administer at AMS that's more successful on behalf of the grower community across the country. This information is invaluable to them.

What we have been doing is developing a database so we can collect market news information in one central depository. Right now hard copies are difficult to retrieve and do not provide adequate flexibility for data manipulation. A number of growers have asked if we can provide some of the older market news reports. To do so, we have got to retrieve them manually for dissemination. The database provides a computerized system that makes us more effective in our administration of the program and, more importantly, allows the grower community to access the information so they can look at marketing trends and ultimately make better decisions on what crops to grow, where to sell their crops for the best price, and where to change some of their practices.

Mrs. **Smith**. That's a thoughtful answer. Thank you very much.

No further questions, Mr. Chairman.

Mr. **Whitten**. Mr. Akaka?

FOOD SAFETY

Mr. **Akaka**. Thank you very much, Mr. Chairman.

I am particularly interested in your proposal of $15.8 million for the Food Safety Program. I read in your statement here that it is to develop a comprehensive database and then communicate information to the people. You are working with three other agencies in this respect. My question to you is, how are you going to develop this database? Do you have the technical abilities, technical devices to do that or is that request pending?

Mr. **Haley**. One of the key components of our program is that it will be Federally supervised but State operated. We don't want to create a new bureaucracy or a new FDA, if you will, within USDA. We want to tap into the very comprehensive programs that already exist in the States. For instance, the State of California probably has the most comprehensive program, and there are another three or four or five States that have similar programs. We want to use the State programs so we don't reinvent the wheel. We will use some technical hardware such as gas chromatographs, but our overall function in this program is to develop the protocols to ensure that a consistent methodology is used by everyone involved.

Mr. **Akaka**. I think Jack Parnell would agree with you about California's ability. This area is very critical to the future and what you mentioned about building confidence in the general public is very important. What is making it difficult is when you have the ability to measure trace, then you have other problems to deal with. In giving out information, even if you mention trace, it will alarm people even though you can say that it is of no harm to anybody. But this is going to be a difficult area and I wish you well.

Mr. **Haley**. Thank you very much.

Mr. **Akaka**. Thank you, Mr. Chairman.

Mr. **Whitten**. Mr. Smith?

Mr. **Smith**. I don't have any questions.

Mr. **Whitten**. Mr. Skeen?

FOOD INSPECTION

Mr. SKEEN. Thank you, Mr. Chairman.

Ms. Smith, Mr. Haley, I am really interested in what you have proposed for Food Safety. Before I start asking you any questions, I want to make a statement that I am sincerely troubled at the exploitation of the food safety issue in the United States that has gone on for whatever reasons. I think that your program hits right at the heart of it. It isn't that the American people don't feel safe and secure; the problem is that the American people are made to feel unsafe or insecure because of the lack of data. That is why I think it is extremely important that your program be initiated, not so much just to give you a new program to spend more money on, that's not the idea at all. I think it goes into the whole web of risk analysis and risk assessment because I think food safety has been an issue that has been mighty exploited.

I saw a television program two nights ago about how organically grown food is the hottest item on the shelves today. Nobody can tell you what they mean by organically grown or produced foods. There is no definition to my knowledge. But I would think that in light of the fact that we also understand that through new testing processes there are some naturally occurring toxins that also present just as much danger as some of those that have been mentioned, such as the Alar scare and some of the rest.

What I would like to know is, do you intend with your testing program to give us a base of credibility with the data that you are going to produce so that we can understand in some kind of easily understood perspective what we are talking about as far as toxins are concerned, either naturally derived or those that are added through the use of pesticides. Does your program include that kind of testing for both naturally produced toxins as well as those that are residue toxins?

Mr. HALEY. That's a very interesting question.

Mr. SKEEN. It was to me. I didn't know whether it would be to you.

Mr. HALEY. The short answer is that our program does not include testing for natural toxins, although I am very well aware of the issue. I guess I would answer your question this way, Mr. Skeen, that our program has two components. One is the gathering of pesticide residue levels, and the other is dissemination of information on our findings.

Mr. SKEEN. That's exactly correct. You have got a testing program and you have an information dissemination program.

Mr. HALEY. We could certainly incorporate information about natural toxins into our program, and how they compare with those we call synthetic pesticides. I was given an example of a natural toxin when I was back in California, where the toxicologists explained it to me. They used the example of lettuce; we use chemicals on lettuce to keep natural predators away. Once they stopped using those chemicals, the living plant, the head of lettuce, created its own toxic chemicals which were in some cases much more toxic than the synthetic pesticides that had been applied.

Mr. SKEEN. That's precisely the point.

Mr. **Haley**. I think maybe we could include some information like that in the program.

Mr. **Skeen**. I would ask that you consider this. If we are going to have that kind of program that provides a common denominator of responsibility insofar as assuring the American people that their food is relatively safe within some context or another and quantify it and then distribute that information, it is most important. But I don't want to see us mislead the American people as they are being misled today because it is a great marketing device to claim that there is something wrong with food. Nobody can tell you what in the sam hill it is, how toxic it is, where it is, where it came from, and why it is used.

So if you are going to have this kind of a testing program, I think it ought to include just exactly that kind of data so that we know where we are going in the food supply. It is a risk analysis program once and for all so that we don't have to go through this nebulous business of somebody exploiting the risk factor. I hope that your program will do that. I appreciate the fact that you know that kind of a testing program is absolutely essential because there is a huge void in just that kind of scientific data available to the American public today.

I thank you for your responsiveness.

Thank you, Mr. Chairman.

Mr. **Whitten**. This subcommittee has a long record of doing what it thought was right. As I have pointed out many times, there is no such thing as zero. You have agreed with this on your side of the table. There is a trace in everything. Secretary Sullivan of HHS had this to say when he came out against red dye No. 3, and I quote, ". . . small as the risk is, we have no choice under the law but to end the provisional listing of this product." So if there is no such thing as zero, and if you follow the actions of Secretary Sullivan that you have to carry out this law, everything we have will be dependent on sufferance. It is a shaky thing.

Public reaction is a funny thing, I have dealt with it all my life. Sometimes public sentiment goes one way; sometimes the other, you just can't control it. What is going to be the reaction when they read about how much money your requesting this year to check the food supply for pesticide residues? Even though you are trying to prove there is nothing wrong with the food supply, is it going to look like you know that something is bad and want to find out how bad it is? Now I don't know if that is what the public will see or what the press will write about this meeting, but we are dealing with public opinion. If Secretary Sullivan is right, and he is right in that there is no such thing as zero, there is a trace in everything. Have you thought about that?

Mr. **Haley**. I think the Administration, Mr. Whitten, has a coordinated proposal on food safety.

Mr. **Whitten**. The Administration is a broad statement, that's like saying a community of intelligence. Who are you talking about?

Mr. **Haley**. The Bush Administration, including EPA, FDA, and USDA, has come forward with a food safety proposal.

DELANEY CLAUSE

Mr. **Whitten**. Well, where are you going to draw the line? I mean, the reaction might be that when you spend this much money on an issue, it must be something serious. I agree that the situation is serious if everything is going to be by sufferance. Wouldn't it be better to spend some of the money you are requesting modifying the Delaney Clause to where it is absolutely safe. If everyone takes a view that they have to carry out the Delaney Amendment, we will all starve.

Mr. **Haley**. We agree with you concerning the Delaney Amendment.

Mr. **Whitten**. Do you agree with me that we will all starve?

Mr. **Haley**. No, sir.

Mr. **Whitten**. I just want to know how far you are going. What effort are you making to get the Delaney Clause amended? I am just saying that as long as there is no such thing as zero, somebody should draw a line that could be enforced. As it now stands, any Secretary that takes it upon himself can say well, that's the law so I have got to carry it out. Secretary Sullivan is one of the best men we have got in Government. I have talked to him about this. I wouldn't say he regrets what he did, but I don't think he agrees that he should have to do it the way he did. I am all for doing what you propose to do here, but I wonder if we shouldn't give some attention to setting a standard where a fellow knew whether it was in or out. If he is out, I want to join you in getting him out.

Are you doing anything special to get the Delaney Clause amended to where the public safety is absolutely protected but where we're not chasing zero?

Mr. **Haley**. We have forwarded a proposal to do away with the Delaney Clause and replace it with what is called a "negligible risk" standard. That standard would work perfectly with the information we're trying to convey to the American public with this program.

Mr. **Whitten**. Where is that pending now? Are you pushing for that change?

Mr. **Haley**. Yes, sir, we are.

Mr. **Whitten**. I think we are going to have to as long as we get into this.

Mr. **Haley**. Yes, sir, we are.

Mr. **Whitten**. When you measure parts per trillion, it is just unbelievable.

Mr. **Haley**. Parts per trillion is one second in 36,000 years.

Mr. **Whitten**. That's right. But if everybody took the statement that Secretary Sullivan made, you would have to ban everything under the Delaney Clause. I hope you will keep us advised as to what efforts you make on the Delaney Clause.

Mr. **Haley**. We will be happy to keep you informed.

Mr. **Whitten**. Mr. Durbin?

FOOD TESTING

Mr. **Durbin**. Thank you, Mr. Chairman. I am sorry, I came in a few minutes late, but I have been intrigued by the discussion since I arrived.

Several years ago I joined a member of the subcommittee staff and went to a place called Nogalez, Arizona, which is one of the major import points in the United States for fruits and vegetables from Mexico and Central America. The purpose of our trip was to assess the efforts that were being made to determine whether there were harmful chemical residues on the produce being brought in. We focused on the FDA, but we also ran into a number of people from the USDA in our travels. It is interesting what we found.

The gentleman who worked for the FDA was a retired fellow who rode a bicycle to work and it was kind of a hobby for him. He had a little office by himself, had some brown paper bags, and as the truckers would come into the depot, the truckers would come by his shop, he would hand them the brown paper bags and they would go out and collect a sample for him off their own trucks. They would then bring it to him and he would decide which ones to send to Los Angeles.

The ones he decided to send to Los Angeles had to be put on a bus. The bus of course left late in the day, with good luck—and, surprisingly, while we were there they had very good luck—it would arrive the next day at the FDA laboratory in Los Angeles, at which point it went through a testing process. The FDA laboratory in Los Angeles, I don't know if it has changed, was not the greatest facility in the world. In fact, the ceiling was falling down in the office space because there had been leaks in the plumbing and it was pretty run down. When we went up to the lab we found that they had a limited amount of equipment. Their testing procedures for residues on fruits and vegetables were somewhat limited because they had to start off with certain assumptions as to what they might find, if there had been an excess application of the chemical, for example. That didn't account for drift, which occasionally can cause totally unexpected problems. Needless to say, if they found something wrong with the shipment, by the time the information got back to Nogalez, Arizona, the truck was long gone. So they waited until the next time around to try and catch him

I left that little trip with some pretty solid impressions. The first was if we are creating undue alarm among people of America about chemicals and pesticide residues on fruits and vegetables, that the system in place, as good as it is, has some problems. Since there is no longer air service between that portion of Arizona and Los Angeles, there is not going to be immediate testing. No trucks are going to be held up because the product involved is perishable. The testing procedure itself is limited because of the money that we are investing in FDA. I made some suggestions to FDA about changing their procedures. I came away believing that if we really wanted to convince the American people that we were taking a good random sample, testing it accurately, and stopping that limited amount of produce coming into this country that was dangerous from getting to the consumer, we had to change some procedures. That's why I am a little concerned with your request for $15.8 million to start looking for an objective data base on chemical residues in foods.

Why should we invest the first nickel in a new initiative on this before we make the present system that the FDA is using a system that can restore confidence?

Mr. HALEY. Mr. Durbin, I would be happy to respond to your question. In fact, I don't know if you remember, but I was with you in Sacramento the day after your visit.

Mr. DURBIN. That's right, you were. You were a State employee at the time, were you not. Oh, sure. Good to see you again. Long time, no see.

Mr. HALEY. And we discussed that subject at the time. I guess I would start by saying that the FDA program, like the State of California program, is an enforcement program that is basically trying to detect hot spots, illegal residues, things that are harmful to health. While we can do more enforcement, we have to realize that the California program, the Washington State program, the Florida program, and the FDA program all really see the same picture of our food supply, not only domestic foods, but our imports as well. That picture shows that 85 percent of the product sampled has no detectable residues and 14 percent has below 50 percent of the illegal tolerances. Only 1 percent is out of compliance, and as you just mentioned, some of the products out of compliance aren't always a real health problem, it may be a drift or something of that nature.

So we do have a pretty good picture. If it were not, you would think that somewhere along the line someone would detect something different. What I am trying to do is contrast what FDA and the States are doing on enforcement with what our program proposes to accomplish. This program is not meant to enforce illegal residues. What we are trying to show is that there is a big difference between the pesticides applied in the field, the amount left on the product at the dock, the amount left on the product at the retail or wholesale distribution point, and ultimately, the amount found at the retail level and the dinner table. Testing has shown that pesticide residue at the consumer level is drastically reduced and degraded. What we are not doing is taking that information and putting it into our risk assessment. Therefore, we really have two separate programs with two separate goals.

STANDARDS

Mr. DURBIN. We asked the FDA what kind of standards they were using, what is dangerous, how do you determine that when it comes to each of these chemicals that you find. And they were—I am reaching back to try to remember some of the answers now—but they referred to some international standards. I think they might have referred to the Patell Institute. Is it possible that they were involved in establishing some standards on chemical residues.

Mr. HALEY. The FDA enforces EPA tolerances.

Mr. DURBIN. But I wonder what are you going to add to this procedure? What I described to you sounds like a procedure which—I don't question your statistics for a minute that only 1 percent of the produce coming in may be dangerous—but what are you going to add to it? I mean, are you seeking to change the standards that are applied by FDA and other testing laboratories as to what is safe for the American consumer?

Mr. Haley. No, I guess I would do it this way. To use an example, it was recently announced to the public that the EPA was going to ban the use of EDBC fungicides. Part of the reason they had to take that drastic course at the beginning of the cancellation process is because they didn't really have actual exposures. They did not have real "market basket" numbers to plug into their risk assessment to know what level is really safe and what is not safe.

What we are trying to do with our program is make sure the other agencies have that information so they don't take away necessary tools of our agricultural growers to the growers' detriment. By the same token, our program is a double-edged sword. We are going to be doing sampling at the retail level. If we find exposures that constitute a significant risk, we will then enhance FDA's program by letting them know where the problems are so they can take appropriate action. Also, if we find hot spots or pesticides that create a significant risk, we will feed that information to EPA so those materials are pulled off the market. I think our program will enhance both sides of the issue.

Mr. Durbin. I think it would enhance the process, but I can't at this moment justify that kind of investment without investing more in the front line defense. The first real inspection for this problem occurs at the border where, if there is a problem, it should be stopped. If it reaches the grocery store shelf or the consumer's table and you find the hot spot, then we have failed in the first instance.

I am anxious to work with you. Good to see you again, though I guess I didn't expect to find you here. I hope to work with you in coming up with some approach which will, as we said here earlier, restore some confidence and settle some of the doubts among consumers as to what is safe and what isn't. Thanks.

Mr. Whitten. May I say thank you for your appearance. Any time a new program is proposed it always creates some questions and problems. Your increase in money is for the supervision of this work, you expect to have the States do the work, is that right?

Mr. Haley. That is correct.

Mr. Whitten. Having been on this committee for a long time, its apparent that California does a real good job, after all it is a big State. As I have frequently said, it is kind of a miniature United States in that some section of California has got just about anything that the whole United States has. Although it is big and way ahead in many ways, we have got 49 other States in our Nation.

How much checking have you done to see how accurate all States are in their work related to pesticide residue testing? How much can you rely on the States, if that is who is going to actually do the work? What Mr. Durbin has brought up here is very significant in that the mechanics have got to work as well as the money.

Mr. Haley. You're absolutely right.

Mr. Whitten. Have you done anything to check the various States?

Mr. Haley. We have talked to some States, and are continuing that process, Mr. Chairman. We have contacted the three, four, or five States which are the most productive in fruits and vegetables and those whose systems are the most comprehensive. There are a lot of programs on pesticide residues.

Mr. **Whitten**. Your request here is for fiscal year 1991 and won't become available until October. I am going to ask you to give us a more detailed report on what you are doing now and what you plan to accomplish. In the meantime, I am going to ask you to use some of your current funds and personnel to do some spot checking so you can give us some further details prior to marking this bill up. We are all interested in the objective you have. The question at hand is how to go about getting the money and that takes a little planning now and then. So I ask that you do some checking and give us some detailed information on the States. We will probably ask you back before we get to markup to just see what we're dealing with because the mechanics of it are a big part of success, as I see it.

Mr. **Haley**. I'll be happy to provide more information.

Mr. **Whitten**. Mr. Traxler has some questions he would like answered for the record. Are there any further questions? Well, thank you all for being here this morning. We were glad to have your testimony.

[The questions and responses follow:]

SECTION 32

Mr. **Traxler**. Your efforts in purchasing commodities for use in feeding programs including the school lunch program are appreciated. However, I have heard some complaints that the manner in which you package cherries may not always be in line with what schools might prefer to receive. As a result, the ability to match a commodity with the school might be hindered. I believe this matter goes to the degree of processing associated with the cherries.

To what extent do you respond to these concerns, and how do you atempt to integrate them into your purchase orders?

Response. Since June 1989, frozen cherries bought by USDA must be packed in 30-pound plastic containers to avoid leakage which often occurred with cherries packed in metal cans. We continually strive to respond positively to all complaints received and make necessary modifications in our commodity procurement documents. Factors such as increased cost to the government and commercial availability must be considered as well as the requirements of recipients.

Mr. **Traxler**. Are you getting sufficient guidance from the Food and Nutrition Service?

Response. Yes. We have a good cooperative working relationship with the Food and Nutrition Service.

Mr. **Traxler**. Many feeding programs are facing problems from the shortage of dairy products due to reduce surpluses. Some of us believe that these products should be purchased outright and not depend upon levels of surplus. There has been a suggestion that you could make these purchases with Section 32 funds. Can you describe for me whether or not this is a feasible option, and if not why not?

Response. It has been USDA policy that Section 32 funds be used principally for perishable nonprice-supported commodities that are in surplus. Currently, most dairy products are not in surplus Government inventory and are not available for distribution. Section 32 funds can be used to buy nonsurplus agricultural commodities and products of the types customarily bought with such funds under the National School Lunch Act, the Child Nutrition Act of 1966, and Title III of the Older Americans Act of 1965. Dairy products are not customarily purchased with Section 32 monies.

Mr. **Traxler**. What would be the mechanics of your making a purchase of dairy products with Section 32 funds?

Response. If Section 32 funds were used to buy surplus dairy products, the most efficient approach would be to transfer the necessary funds to the Agricultural Stabilization and Conservation Service. That Agency already has on board personnel skilled in the procurement of dairy products. The Agricultural Marketing Service does not currently have staff available to perform this specialized function.

BIOGRAPHY OF DANIEL D. HALEY

Before joining AMS as Administrator in September 1989, Haley served for two years as chief deputy director of the California Department of Food and Agriculture. In that position, he directed more than 2,500 State employees and was the key liaison to the State legislature and governor's office.

Prior to his appointment as chief deputy director, Haley held several positions with the Western Growers Association. He was the organization's Vice President for Government Affairs from 1983 to 1987. Previously, he served as attorney and head lobbyist, representing the trade association in California, Arizona and Washington, D.C.

Haley received a bachelor of arts degree from Arizona State University in Tempe and a juris doctor degree from the Western State University College of Law in San Diego.

AGRICULTURAL MARKETING SERVICE

Statement of
Daniel D. Haley, Administrator
Before The
House Subcommittee on
Rural Development, Agriculture, and Related Agencies

Mr. Chairman and Members of the Committee, I appreciate the opportunity to appear before you today to present our fiscal year 1991 budget request. Accompanying me today are Kenneth C. Clayton, Deputy Administrator for Marketing Programs; Linda P. Massaro, Deputy Administrator for Management; and Joseph A. Roeder, Director of the Financial Management Division.

Prior to presenting the specifics of our budget request, I would like to briefly discuss AMS' mission.

The Agricultural Marketing Service Mission

The Agricultural Marketing Service (AMS) administers more than 30 statutes which authorize us to carry out a wide array of programs aimed at facilitating the marketing of agricultural products, assuring consumers of a quality food supply, and ensuring fair trading practices. We:

* provide comprehensive market information on a daily basis,

- develop and maintain quality standards for agricultural products
- inspect and grade commodities
- procure surplus agricultural commodities
- administer marketing orders
- conduct marketing research
- administer statutes through regulation
- conduct cooperative programs with the States to improve local marketing systems

The goal of these programs is to make the U.S. marketing process the most efficient, dependable, economical, and equitable system possible. We strive to adapt our services to changing marketing practices and technological advances, and to be reflective of producers' and consumers' needs.

It perhaps goes without saying that consumer confidence in the safety of the food supply is important to the marketing of agricultural products. Recent concerns over food safety clearly present new challenges to producers, marketers, and government agencies, such as the Agricultural Marketing Service.

Our budget request, which I will discuss next, includes funding to develop a more proactive approach to several of these challenges--by improving inspection, providing greater protection of our food supply, and allowing us to better respond to consumers' and producers' food safety concerns.

Budget Proposal

AMS has three separate accounts for which we receive appropriated funds: Marketing Services, Payments to States and Section 32 Administrative Expenses. For Marketing Services, our FY 1991 budget request is $52.3 million--$19.1 million more than the fiscal year 1990 level.

Our request for Payments to States and Possessions is $942,000, a decrease of $294,000 from the fiscal year 1990 level.

Our Section 32 administrative request is $14.2 million, $2 million more than the fiscal year 1990 level.

Included within the proposals are increases for monitoring pesticide residues, egg products inspection, market news, commodity procurement, marketing agreements and orders, and funds to offset increased operating costs.

The budget request does not propose any program eliminations.

Marketing Services

In our Marketing Services accounts we are requesting additional funding of:

-- $15.8 million in our Market Protection and Promotion program to initiate a pesticide residue monitoring program for fresh fruits and vegetables.

-- $1.1 million in the Egg Products Inspection program for increased monitoring and more prompt enforcement of regulations governing safety and wholesomeness of egg products.

-- $535 thousand for our Market News program to continue development of a computerized data base and communications network.

Section 32 Administrative

In our Section 32 Administrative account, we are requesting:

-- $1.2 million for operational costs associated with the Processed Commodity Inventory Management System (PCIMS).

-- $352 thousand to improve administration of marketing agreements and orders.

Finally, we are also requesting $540,000 to offset increased costs in non-salary operating expenses, such as travel, printing, and telephone charges, and $1.5 million for increased pay costs.

In addition to these changes, we have legislative proposals which, if enacted, would reduce our need for appropriated funds. In our Marketing Services account, our appropriated needs would be reduced by $4.4 million if user fee legislation is enacted. Similarly, in Section 32, $8.3 million could be saved if authorizing legislation is enacted.

I intend to discuss these legislative proposals in more detail later. However, at this point, I would like to more fully explain our need for increased funding in certain programs, and the benefits resulting from these additional funds. Overall, our requested increases will enable us to react to food supply issues which are of national interest, and to implement technological changes which will improve our efficiency.

Food Safety

Food safety and determining quality attributes of agricultural products are at the core of our agency's mission. With respect to food safety, we provide continuous inspection of egg breaking and processing plants producing liquid, frozen, or dried egg products to ensure the wholesomeness of these products. Shell egg handling operations are inspected at least four times annually to control the disposition of certain types of restricted eggs.

In addition to these legislatively mandated food safety activities, AMS provides analytical testing for microbiological and chemical elements relating to processed dairy products, eggs, meat and poultry, and fruits and vegetables in support of voluntary grading, certification, and acceptance programs. We also provide testing of peanuts and other commodities for aflatoxin.

Our FY 1991 budget proposal of $15.8 million for food safety is part of a USDA coordinated effort to address this issue. Four agencies, including AMS, are requesting a total of $25.0 million to develop an objective data base on chemical residues in foods to help restore the public confidence in our U.S. food supply. Representatives from the National Agricultural Statistics Service, the Economic Research Service, and the Human Nutrition Information Service have already discussed their proposals with you during their respective hearings.

AMS' involvement in this Departmental initiative is to develop a nationwide pesticide residue monitoring program. The goal of the program will be twofold:

- to develop a comprehensive data base on pesticide residues that will be federally-administered and state-operated to help ensure the safety of the domestically-produced American food supply, and

- to communicate this food safety information to consumers both in the U.S. and to our international trading partners.

During the first year, our efforts will be limited to pesticide residues found on fresh fruits and vegetables in high production States. In subsequent years, efforts will be expanded to include other States or commodities. Under the proposed program, States will sample and test commodities within market distribution channels for pesticide residues. Uniform protocols for random sample collections, pesticide analyses, and data reporting, including laboratory quality assurance programs, will be used. AMS will consolidate and analyze this information and regularly report the results and the public health significance to the public, the media, and government officials. This program will contribute to improving the Government's risk assessment and risk management procedures, and will be interconnected with the pesticide usage survey initiative of NASS and ERS, as well as the residue exposure assessment initiative of HNIS.

In addition to collecting and analyzing nationwide data on pesticide residues, we have other ongoing programs that require increased attention because of food safety concerns. Although great progress has been made in identifying and preventing some foodborne diseases, outbreaks of microbial origin continue to persist or are on the rise, such as the case with Salmonella enteritidis (Se). Previously unrecognized pathogenic microorganisms are being acknowledged, and new techniques in food processing and storage have created new types of safety and wholesomeness issues. In response to these concerns, our 1991 budget proposes $1.1 million for the initiation of a surveillance program to determine if these new foodborne pathogens are potential problems in egg products.

Further, we propose to expand our current egg products residue monitoring program. Unlike the microbiological surveillance program, this program is designed to investigate and control the movement of potentially adulterated products. Also needed are development efforts on new rapid detection tests to enhance laboratory capabilities for dealing with both microbiological and chemical contamination. Also in response to changing food safety concerns, we will evaluate a Hazard Analysis Critical Control Points program to monitor potential microbiological contamination in egg processing facilities. Under this system, identification and assessment of hazards associated with growing, harvesting, processing, marketing, preparation, and use of a given raw material or food product will be made at key points in the production process.

We believe these initiatives, coupled with efforts by our sister agencies within the Department, will allow us to proactively deal with emerging pesticide problems and help ensure that changing industry practices and scientific and technological advances are consistent with a safe and wholesome food supply.

Market News

I would now like to discuss other functions of AMS not directly associated with food safety, but ones of critical importance in helping us to enhance the marketing system. I will limit my discussion to those programs where enhancements are needed to enable us to more efficiently provide our services.

Our market news program collects and disseminates pertinent agricultural market information to the public, as well as to other USDA organizations, state and federal agencies, and institutions. Producers, dealers, wholesalers, and agricultural analysts rely on this timely information for their very livelihoods. The current method of preparing reports for dissemination is redundant and time consuming. Rekeying of information is often necessary by market news personnel. In addition, there currently is no automated system for storing and retrieving information. Other problems include having to customize the format of each report, manually reviewing hard copies to retrieve requested information and duplicating data for analytical purposes. In recognition of these outdated procedures, AMS has been developing a comprehensive database system that will allow market news personnel to enter, retrieve and analyze data in a more efficient manner. Our 1991 budget includes $535,000 which will enable us to enter the final stage of this project and purchase the equipment necessary to complete this effort.

Commodity Procurement Services

AMS' commodity procurement program involves the purchase of agricultural commodities to meet the entitlement needs of the National School Lunch and other domestic feeding programs. Purchases of commodities in excess supply also stabilize market conditions. The data systems that have been used by the

Agricultural Marketing Service, the Food and Nutrition Service and the Agricultural Stabilization and Conservation Service to purchase, store, and deliver commodities were developed to meet individual agency requirements. The need for a coordinated procurement system was recognized several years ago and efforts have been underway to develop a Processed Commodity Inventory Management System (PCIMS). Our 1991 budget includes $1.2 million which will enable us to fund AMS' portion of this system. The system will provide for better control through more accurate, consistent, and timely information; better analysis of bid alternatives; and quicker response to changed requirements mandated by Congress or the Secretary of Agriculture.

Marketing Agreements and Orders

Our last requested program increase is for our marketing agreements and orders program. This program helps stabilize supplies and market prices for milk and fruits and vegetables, thus benefitting both producers and consumers. Over the last several years, marketing orders and regulations have become more complex and our resources to adequately review these orders have been severely strained. Funding of $352,000 is being requested to provide more frequent reviews of marketing order operations, and to provide enhanced analysis of rulemaking and industry/committee proposals. Also, additional funding is needed to more effectively enforce the civil penalty provisions for violators of marketing orders.

Fiscal Year 1991 Legislative Proposals

In addition to these programmatic changes, we are also proposing legislation that would convert the source of funding for our standardization, marketing agreements and orders, and printed tobacco market news report programs from an appropriation to user fee basis.

Specifically, AMS proposes to charge user fees to:

-- Recover the $3.9 million cost of developing, reviewing, or modifying commodity standards. The cost of this work will be incorporated into existing grading fees, increasing them by an average of 3.5 percent.

-- Recover the $9.4 million cost of administering marketing agreement and orders programs for milk, fruits, vegetables, and nuts, including the statistical analyses of market conditions currently performed in the Market Development and Assistance program.

-- Recover the $30,000 cost of postage, printing, and handling of tobacco market news reports. This is the last remaining printed market news report which AMS provides free-of-charge.

Over the years, AMS has consistently and successfully pursued efforts to transfer program costs from the general public to the primary beneficiaries. Our fiscal year 1991 user fee proposals are a continuation of that effort.

In order to accomplish this conversion to user fees, we are requesting one-time funding of $577,000 to fund liabilities such as annual leave and workers' compensation that accrued while these programs were appropriation supported.

This concludes my statement, Mr. Chairman. At this time, I would be glad to answer any questions regarding our program activities or proposed budget.

AGRICULTURAL MARKETING SERVICE

Purpose Statement

The Agricultural Marketing Service (AMS) was established by the Secretary of Agriculture on April 2, 1972. AMS carries out programs authorized by 35 different statutory authorities, the primary ones being the Agricultural Marketing Act of 1946 (7 U.S.C. 1621-1627); the Agricultural Marketing Agreement Act of 1937 (7 U.S.C. 601-602, 608a-608e, 610, 612, 614, 624, 671-674); the U.S. Cotton Standards Act (7 U.S.C. 51-65); the Cotton Statistics and Estimates Act (7 U.S.C. 471-476); the Tobacco Inspection Act (7 U.S.C. 511-511q); the Perishable Agricultural Commodities Act (7 U.S.C. 499a-499s); the Egg Products Inspection Act (21 U.S.C. 1031-1056); and Section 32 (15 U.S.C. 713c).

The primary objective of AMS is to enhance the marketing and distribution of agricultural products from the Nation's farms. This is achieved through the collection and dissemination of market news information, the establishment of grading standards, inspection and grading services, and various marketing development programs. Approximately three-fourths of the funds needed to finance these activities are derived from user fees.

The Agricultural Marketing Service administers the following programs:

1. Market news service: The market news program entails the collection, analysis and dissemination of supply, inventories, prices and other market information for numerous agricultural commodities, including cotton and cottonseed; dairy products; fruits and vegetables; livestock, meat and grains; poultry products; and tobacco.

   Market news provides timely, accurate, and unbiased information to assist producers, growers, and marketers of farm products in making critical decisions of where and when to sell, and at what price. The collection of market information is a joint effort by both Federal and State reporters.

2. Inspection, grading and standardization services: AMS develops and maintains standards of quality and condition for use in the grading of agricultural commodities. These standards provide a common language of trade for buyers and sellers of these commodities both here and abroad. AMS provides grading and certification services upon request for numerous agricultural commodities, including cotton, dairy products, fruits and vegetables, livestock and meat, poultry and eggs, and tobacco. AMS also provides: continuous in-plant inspection to manufacturers of liquid, frozen, or dried egg products to ensure that egg products are wholesome, unadulterated, and fit for human consumption; inspects egg handlers and hatcheries quarterly to ensure the proper disposition of restricted eggs; and controls the importation of egg products to ensure that U.S. requirements are met.

   The inspection and grading activities are performed by Federal and Federally-supervised State employees. The egg products inspection program is mandatory and is funded from appropriations while grading activities are provided on a fee-for-service basis.

   The commodity scientific support program conducts laboratory tests on agricultural commodities to aid the commodity divisions in assigning grades to submitted samples. The program assures that commercial and private laboratories are performing tests in a consistent, uniform, and accurate manner.

3. Market protection and promotion services: AMS administers several laws to ensure proper marketing practices, stimulate innovative and improved commodity marketing, and provide assistance to industry-sponsored activities. The Federal Seed Act requires truthful labeling of seeds shipped in interstate commerce to prevent misrepresentation. The Plant Variety Protection Act encourages the development of novel varieties of

sexually reproduced plants by providing patent-like protection to developers. Oversight and direction is provided to several industry-funded research and promotion programs. During the past year, approximately $360 million was collected through producer assessments and used by industry to broaden and enhance local and national markets for various commodities. Currently there are active research and promotion programs for beef, cotton, dairy products, eggs and egg products, honey, pork, potatoes, lamb and wool, and mohair.

4. Wholesale market development: Under this program, AMS provides technical advice and assistance to States and municipalities interested in creating new or upgrading current wholesale market facilities. AMS also conducts cooperative feasibility studies with other government agencies and the private sector to evaluate and suggest improvements in the efficiency with which agricultural commodities are handled and marketed.

5. Federal-State marketing improvement program: This program provides matching funds to State Departments of Agriculture for projects intended to improve the marketing of farm commodities. These funds enable the States to conduct marketing projects to improve local marketing systems. The aim of the program is to reduce the marketing costs for producers and, ultimately, the retail cost of food to consumers. Projects include work in innovative marketing techniques, testing study findings in the marketplace, and developing State expertise in providing service to marketers of agricultural commodities.

6. Perishable Agricultural Commodities Act: Through legal recourse procedures this program protects producers, shippers, distributors and retailers of fresh and frozen fruits and vegetables from financial loss due to buyer bankruptcy or unfair and fraudulent practices in the marketing of perishable agricultural commodities. This program also prohibits the unwarranted destruction or dumping of farm products handled for others.

7. Strengthening agricultural markets and producer income (Section 32): This program provides price assistance to producers through the purchase of surplus and, as necessary, other agricultural commodities from regular market outlets. Contracting offices use both Section 32 program funds and appropriated funds of the Food and Nutrition Service to make these purchases. All commodities purchased are transferred to the Food and Nutrition Service for distribution to schools, to the elderly and to other domestic food assistance programs.

   AMS also develops and maintains standard food specifications used government-wide to provide a more efficient Federal food procurement service.

   AMS supervises the administration of the marketing agreements and orders program and conducts public hearings and referenda to determine producer sentiment toward new order programs and revisions of current programs. Marketing orders maintain orderly market conditions by establishing minimum prices which handlers pay to producers for milk and dairy products and by regulating the quality, quantity, or size of fruits and vegetables which handlers may market in commercial channels.

8. Work performed for others: AMS provides services for Federal, State, and private industry on a reimbursable basis, primarily in connection with the commodity grading and inspection programs.

AMS headquarters are located in Washington, D.C., with approximately 308 year-round and seasonal field offices. The peak employment period for AMS occurs during the four month period, September thru December, due to the seasonal nature of the cotton, tobacco, and fruit and vegetable grading programs. Employment during the peak period averaged 5,118 during fiscal year 1989. As of September 30, 1989, there were 3,470 full-time employees and 1,357 other than permanent full-time employees. Of this number, employees assigned to field office locations totaled 2,825 full-time and 1,334 other than permanent full-time employees.

AGRICULTURAL MARKETING SERVICE

Available Funds and Staff-Years

1989 Actual and Estimated, 1990 and 1991

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Agricultural Marketing Service:						
Marketing Services ...	$33,373,000	641	$33,171,000	633	$52,251,000	668
Payments to States and Possessions	942,000	--	1,236,000	--	942,000	--
Total	34,315,000	641	34,407,000	633	53,193,000	668
Obligations under other USDA appropriations:						
Agricultural Stabilization & Conservation Service for statistical services.......	15,000	--	10,000	--	10,000	--
Federal Grain Inspection Service for statistical services.	244,000	4	250,000	4	250,000	4
Food & Nutrition Service for commodity procurement services	257,982	5	285,000	5	285,000	5
Foreign Agri. Service for general telegraphic services.....	40,190	1	--	--	--	--
National Agricultural Statistics Service for statistical services.............	10,000	--	10,000	--	10,000	--
Office of International Cooperation & Development for administrative services................	48,000	1	48,000	1	48,000	1
Packers & Stockyards Administration for statistical services	65,000	1	60,000	1	60,000	1
Miscellaneous Reimbursements	10,908	--	3,000	--	3,000	--
Total, Other USDA Appropriations...	691,080	12	666,000	11	666,000	11
Total, Agriculture Appropriations ..	35,006,080	653	35,073,000	644	53,859,000	679
Permanent Appropriations:						
Funds for strengthening Markets, Income, and Supply (Sec. 32)	4,552,833,158	142	4,799,509,749	159	5,068,142,328	165

Continued on next page

AGRICULTURAL MARKETING SERVICE

Available Funds and Staff-Years

1989 Actual and Estimated, 1990 and 1991

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Carryin	116,867,619	--	132,717,240	--	291,113,672	--
Deduct transfers out	-4,146,960,326	--	-4,218,489,317	--	-4,694,159,000	--
Deduct carryout	-132,717,240	--	-291,113,672	--	-300,000,000	--
Net AMS	390,023,211	142	422,624,000	159	365,097,000	165
Perishable Agricultural Commodities Act Fund	5,517,546	125	5,423,000	129	5,675,000	129
Total, Permanent Appropriations	395,540,757	267	428,047,000	288	370,772,000	294
Non-Federal Funds:						
American Egg Board for oversight work	42,218	1	55,000	1	55,000	1
Beef Board for oversight work	142,816	2	160,000	2	160,000	2
Pork Board for oversight work	126,649	2	134,000	2	134,000	2
Cotton Board for oversight work	103,500	2	114,000	2	114,000	2
Dairy Board for oversight work	314,092	4	400,000	4	400,000	4
Potato Board for oversight work	49,000	1	56,000	1	56,000	1
Honey Board for oversight work	58,777	1	48,000	1	48,000	1
Soybean Board for oversight work	--	--	162,000	2	162,000	2
Watermelon Board for oversight work	--	--	59,000	1	59,000	1
Egg products inspection	599,644	--	597,000	--	597,000	--
Fees for grading of cotton and tobacco	34,775,868	677	37,962,000	675	40,162,000	654
Grading of farm products for producers, processors, and municipal, State and Federal Agencies	85,414,065	1,934	84,775,000	1,923	87,689,000	1,923
Milk Market Administrators for Federal Telecommunications System& employee compensation	32,745	--	29,000	--	29,000	--
States for collection & dissemination of market news information	148,497	3	137,000	3	137,000	3
Total, Non-Federal Funds	121,807,871	2,627	124,688,000	2,617	129,802,000	2,596
Milk Market Orders Assessment Funds	33,288,595	549	38,709,000	548	41,032,000	548
Total, Agricultural Marketing Service	585,643,303	4,095	626,517,000	4,097	595,465,000	4,117

Full-Time Equivalent Staff-Years:	1989 Actual	1990 Estimated	1991 Estimated
Ceiling	4,095	4,097	4,117
Non-Ceiling	225	249	249
Total	4,320	4,346	4,366

AGRICULTURAL MARKETING SERVICE

Permanent Positions by Grade and Staff-Year Summary

1989 and Estimated 1990 and 1991

GRADE	1989			1990			1991		
	HEADQUARTERS	FIELD	TOTAL	HEADQUARTERS	FIELD	TOTAL	HEADQUARTERS	FIELD	TOTAL
ES-6	1	--	1	1	--	1	1	--	1
ES-5	--	--	--	--	--	--	--	--	--
ES-4	6	--	6	6	--	6	6	--	6
ES-3	--	--	--	--	--	--	--	--	--
ES-2	--	--	--	--	--	--	--	--	--
ES-1	5	--	5	5	--	5	5	--	5
GS/GM-15	24	2	26	26	2	28	26	2	28
GS/GM-14	63	19	82	65	20	85	65	20	85
GS/GM-13	98	52	150	105	56	161	106	56	162
GS-12	130	153	283	133	157	290	134	157	291
GS-11	55	212	267	57	220	277	59	220	279
GS-10	--	20	20	--	18	18	--	18	18
GS-9	49	714	763	49	710	759	51	709	760
GS-8	11	230	241	11	238	249	13	236	249
GS-7	83	241	324	80	234	314	86	233	319
GS-6	48	32	80	46	30	76	50	30	80
GS-5	41	219	260	40	216	256	43	217	260
GS-4	56	143	199	54	139	193	55	140	195
GS-3	17	16	33	19	17	36	19	17	36
GS-2	5	4	9	6	5	11	6	5	11
GS-1	--	--	--	--	--	--	--	--	--
Milk Market Orders Administrators and Staff	--	547	547	--	550	550	--	550	550
Ungraded Positions	1	24	25	1	25	26	1	25	26
Total Permanent Positions	693	2,628	3,321	704	2,637	3,341	726	2,635	3,361
Staff-Years:									
Ceiling	614	3,481	4,095	656	3,441	4,097	678	3,439	4,117
Non-Ceiling	16	209	225	15	234	249	15	234	249
TOTAL	630	3,690	4,320	671	3,675	4,346	693	3,673	4,366

AGRICULTURAL MARKETING SERVICE

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

		1989	1990	1991
Personnel Compensation:				
	Headquarters	$5,806,527	$5,657,000	$6,828,000
	Field	13,548,562	14,235,000	15,421,000
11	Total personnel compensation	19,355,089	19,892,000	22,249,000
12	Personnel benefits	3,553,876	3,648,000	4,068,000
13	Benefits for former personnel	56,087	81,000	81,000
	Total Personnel Compensation and Benefits	22,965,052	23,621,000	26,398,000
Other Objects:				
21	Travel	1,395,830	1,442,000	1,651,000
22	Transportation of things .	97,291	135,000	139,000
23.2	Rental payments to others.	307,452	306,000	306,000
23.3	Communications, utilities and misc. charges	2,506,692	2,468,000	2,840,000
24	Printing and reproduction.	150,147	175,000	301,000
25	Other services	4,108,360	4,163,000	17,732,000
26	Supplies and materials ...	588,616	422,000	837,000
31	Equipment	832,620	439,000	2,047,000
41	Grants, subsidies and contributions	942,000	1,236,000	942,000
42	Insurance claims and indemnities	1,501	--	--
43	Interest and dividends ..	2,467	--	--
	Total Other Objects	10,932,976	10,786,000	26,795,000
	Total Direct Obligations	33,898,028	34,407,000	53,193,000
Position Data:				
	Average Salary, ES positions	$73,550	$76,233	$92,208
	Average Salary, GM/GS positions	$29,184	$30,444	$31,469
	Average Grade, GM/GS positions	8.7	8.7	8.7

AGRICULTURAL MARKETING SERVICE

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Marketing Services:

> For necessary expenses to carry on services related to consumer protection, agricultural marketing and distribution and regulatory programs as authorized by law, and for administration and coordination of payments to States; including field employment pursuant to section 706(a) of the Organic Act of 1944 (7 U.S.C. 2225), and not to exceed $70,000 for employment under 5 U.S.C. 3109, [$33,171,000] $52,251,000: of which not less than [$1,623,000] $1,684,000 shall be available for the Wholesale Market Development Program for the design and development of wholesale and farmer market facilities for the major metropolitan areas of the country: Provided, That this appropriation shall be available pursuant to law (7 U.S.C. 2250) for the alteration and repair of buildings and improvements, but, unless otherwise provided, the cost of altering any one building during the fiscal year shall not exceed 10 per centum of the current replacement value of the building.

MARKETING SERVICES -- CURRENT LAW

Appropriation Act, 1990	$33,171,000
Budget Estimate, 1991	52,251,000
Increase in Appropriation	+19,080,000

MARKETING SERVICES - PROPOSED LEGISLATION

Budget estimate, Current Law, 1991	$52,251,000
Change due to proposed legislation	-4,431,000
Net Request, President's 1991 Budget Request	47,820,000

SUMMARY OF INCREASES AND DECREASES - CURRENT LAW

(On basis of appropriation)

Item of Change	1990 Estimated	Pay Cost	Program Changes	1991 Estimated
Market News Service	$16,366,000	+$619,000	+$709,000	$17,694,000
Inspection and Standardization	13,344,000	+524,000	+1,268,000	15,136,000
Market Protection and Promotion	1,838,000	+64,000	+15,835,000	17,737,000
Wholesale Market Development	1,623,000	+61,000	--	1,684,000
Total Available	33,171,000	+1,268,000	+17,812,000	52,251,000

PROJECT STATEMENT - CURRENT LAW

(On basis of appropriation)

	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
1. Market News Service:							
(a) Cotton and cottonseed.	$1,629,358	28	$1,724,000	29	+$132,000	$1,856,000	29
(b) Dairy products ..	546,596	9	441,000	8	+38,000	479,000	8
(c) Fruits and vegetables.	4,547,440	103	4,741,000	103	+298,000	5,039,000	103
(d) Livestock, meats&grain	6,326,537	126	6,442,000	126	+632,000	7,074,000	126
(e) Poultry products ..	2,047,468	40	2,181,000	42	+165,000	2,346,000	42
(f) Tobacco	742,034	17	837,000	19	+63,000	900,000	19
Total, Market News Service	15,839,433	323	16,366,000	327	(1) +1,328,000	17,694,000	327
2. Inspect. and Standardiza.							
(a) Egg products inspection.	9,317,807	183	9,642,000	184	+1,599,000	11,241,000	194
(b) Standardiztion........	4,224,346	77	3,702,000	66	+193,000	3,895,000	66
Total, Inspec. & Standardiza..	13,542,153	260	13,344,000	250	(2) +1,792,000	15,136,000	260
3. Market Protection and Promotion:							
(a) Federal Seed Act ..	1,083,158	18	1,047,000	18	+47,000	1,094,000	18

(Continued on next page)

PROJECT STATEMENT - CURRENT LAW
(On basis of appropriation)

	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
(b) Plant Variety Protection Act	240.658	4	--	--	--	--	--
(c) Market development and assistance.	703,140	12	791,000	13	+15,852,000	16,643,000	38
Total, Market Protection and Promotion	2.026.956	34	1.838.000	31	(3) +15.899.000	17.737.000	56
4. Wholesale Market Development ..	1.547.486	24	1.623.000	25	(4) +61.000	1.684.000	25
Unobligated bal.	416,972	--	--	--	--	--	--
Total, appropriation..	33,373,000	641	33,171,000	633	+19,080,000	52,251,000	668

EXPLANATION OF PROGRAM

1. Market News Service:

The market news program is carried out under the following authorities:

Agricultural Marketing Act of 1946
Cotton Statistics and Estimates Act of 1927
Naval Stores Act
Tobacco Statistics Act
Tobacco Inspection Act of 1935
U.S. Cotton Futures Act
Peanut Statistics Act
Food Security Act of 1985

Market news information is gathered on various agricultural products including dairy products, fruits and vegetables, livestock and meat, grain, poultry, eggs, cotton and tobacco. Market news provides those engaged in the production and marketing of farm products, as well as related industries with timely, accurate, and unbiased market information. This market information covers local, regional, national, and international markets and includes current data on supply, movement, contractual agreements, inventories, and prices at specific markets for practically all agricultural commodities. On a day-to-day basis those utilizing market news information are in a position to make the critical decisions of where and when to sell, and at what price.

Market information is obtained by both Federal and State reporters at trading points or by telephone. Information collected by these reporters is analyzed and disseminated immediately to the agricultural community by automatic telephone answering devices, facsimile machine, printed reports, radio and television, newspaper columns, and data networks. National information is integrated with local information and released in a form easily understood by the industry and locality served. Beginning in October 1981, AMS began charging subscription fees to cover postage, printing and handling costs for commodity market news reports. On October 1, 1987, AMS began charging subscription fees for its various cotton market news printed and mailed reports. Subscription fees are now charged for all printed and mailed reports except tobacco.

Market News Workload Data, 1989:

Commodity Group	Field Offices Year Round	Field Offices Seasonal	Buyers and Sellers Interviewed	Printed Reports Issued (Thous.)	Number on Mailing List	No. of Federal Reporters	No. of Markets Covered
Cotton and Cottonseed	5	--	2,376	515	3,015	7	7
Dairy and Dairy Products	2	--	500	102	2,605	5	46
Fruits and Vegetables	37	18	10,284	1,258	20,218	55	784
Livestock, Grain, and Meat	50	--	14,900	313	5,455	77	673
Poultry and Eggs	14	--	1,600	76	1,053	25	81
Tobacco	2	2	500	16	960	5	147

2. Inspection, Grading and Standardization:

This program is carried out under the following authorities:

Agricultural Marketing Act of 1946
Agricultural Fair Practices Act
Cotton Statistics and Estimates Act of 1927
U.S. Cotton Futures Act
United States Cotton Standards Act
Naval Stores Act
Tobacco Inspection Act of 1935
Tobacco Statistics Act
Wool Standards Act
Egg Products Inspection Act
Dairy and Tobacco Adjustment Act of 1983
Food Security Act of 1985

This program covers three distinct areas that facilitate the domestic and international marketing of agricultural commodities: development and maintenance of commodity quality standards, egg products inspection, and commodity grading.

a. Standards. AMS develops, reviews, and maintains agricultural commodity standards that describe product quality attributes such as taste, color, texture, yield, weight, and physical condition. Standards are developed for use in grading cotton, tobacco, naval stores, wool, mohair, livestock and meat, poultry, eggs, fruits, vegetables, nuts, and dairy products.

Standardization Workload Data:

	1989 Actual	1990 Estimate	1991 Estimate
International and U.S. standards in effect, end of year	595	596	599
Number of commodities covered	238	239	239
Standards revised	5	13	13

b. Inspection. This activity involves continuous mandatory inspection of egg processing plants producing liquid, frozen, or dried egg products to ensure products sold are wholesome, unadulterated and truthfully labeled. In cooperation with State Departments of Agriculture, shell egg grading operations are inspected at least four times yearly to control the disposition of certain types of undergrade and restricted eggs.

Egg Products Inspection Workload Data:

	1989 Actual	1990 Estimate	1991 Estimate
Egg products inspected (million pounds)	1,636	1,640	1,640
Egg products accepted (million pounds)	26	25	25
Egg products plants	83	86	87
Egg handler surveillance visits	8,769	8,200	7,600
States and Commonwealths with cooperative agreements	52	52	52
Official samples submitted for analysis:			
Food chemistry and microbiology	40,969	42,000	42,000
Chemical residues	517	500	500

c. Grading. The grading process involves the application of quality standards to agricultural commodities. Grading services are offered to users who pay published fees for services provided. These services facilitate marketing by permitting purchasers to buy commodities without having to inspect them personally and by providing an impartial evaluation of the quality of products prior to their sale. AMS certification services provide assurance to buyers that the products they receive are the quantity and quality specified in their contract with the seller.

Grading Workload Date:

	1989 Actual	1990 Estimate	1991 Estimate
Cotton Classifications (thousand bales):			
Smith-Doxey Amendment	13,800	11,500	13,000
United States Cotton Standards Act:			
Public Classing Service	30	32	32
U.S. Cotton Futures Act	400	300	300
Total, Cotton Classifications	14,230	11,832	13,332
Poultry and Egg Grading:			
Poultry products graded (includes rabbits - million pounds)	14,314	15,500	16,200
Shell eggs graded (million dozen)	1,555	1,545	1,530
Pounds accepted (poultry - million pounds)	817	820	820
Dozens accepted (eggs - million dozen)	421	417	413
Meat Grading:			
Meat graded (million pounds)	13,900	15,000	15,700
Meat accepted (million pounds)	800	800	800
Livestock Grading:			
Livestock graded (million pounds)	46	58	58
Fresh Fruit and Vegetable & Nut Grading:			
Product inspected (million pounds)	74,600	75,000	75,500
Processed Fruit and Vegetable Grading:			
Product inspected (million pounds)	8,700	8,800	8,900
Dairy Grading:			
Butter graded (million pounds)	1,435	1,425	1,450
Cheese graded (million pounds)	131	125	140
Dry milk graded (million pounds)	287	285	300
Other products graded (million pounds)	64	70	75
Plant inspections	1,800	1,750	1,750
Tobacco Grading:			
Flue-cured (million pounds)	870	910	910
Fire-cured (million pounds)	5	10	10
Dark air-cured (million pounds)	4	5	5
Burley (million pounds)	531	600	600
Tobacco Reinspection (million pounds)	22	100	120
Imported Tobacco Inspection (million pounds)	188	200	210
Total, Tobacco Inspection and Grading	1,620	1,825	1,855

3. Market Protection and Promotion:

In the administration of market protection and promotion activities the Agricultural Marketing Service operates under the following authorities:

Agricultural Marketing Act of 1946
Capper Volstead Act
Cotton Research and Promotion Act
Egg Research and Consumer Information Act
Export Apple and Pear Act
Export Grape and Plum Act
Federal Seed Act
National Wool Act of 1954
Plant Variety Protection Act
Potato Research and Promotion Act
Dairy and Tobacco Adjustment Act of 1983
Honey Research, Promotion and Consumer Information Act
Beef Promotion and Research Act of 1985
Pork Promotion, Research, and Consumer Information Act of 1985
Watermelon Research and Promotion Act

a. Federal Seed Act. This Act regulates agricultural and vegetable seed moving in interstate commerce. It prohibits false labeling and advertising of seed and the shipment of prohibited noxious-weed seed into a State. About 500 State seed inspectors are authorized to inspect seed subject to the Act. Seed samples are routinely drawn by State seed inspectors to monitor seed sold commercially. Should an inspection reveal infractions of the Act, a complaint may be referred to AMS by the cooperating State agency. Based on the results of the tests and investigations, AMS attempts to resolve each case administratively. If a case cannot be resolved administratively, AMS will initiate appropriate legal action. Intrastate infractions are subject to State laws.

Federal Seed Act Workload Data:

	1989 Actual	1990 Estimate	1991 Estimate
Seed Testing:			
Seed samples tested in connection with:			
Interstate shipments	1,164	1,200	1,200
Check tests	747	750	750
Variety testing	1,997	2,200	2,200
Total number of samples tested	3,908	4,150	4,150
Interstate Enforcement:			
Cases for Investigation:			
Total to be investigated	1,894	1,600	1,600
Investigations completed	983	1,000	1,000
Pending at end of year	911	600	600
Administrative Actions:			
No action warranted	152	150	150
Warnings issued	696	700	700
Citations issued	137	150	150
Prosecutions recommended	--	--	--

	1989 Actual	1990 Estimate	1991 Estimate
Administrative Settlements:			
Settlements terminated	105	100	100
Settlements pending	3	--	--

b. Plant Variety Protection Act. This program offers legal protection to developers of novel varieties of sexually reproduced plants through the issuance of a certificate. These certificates assure developers exclusive rights to sell, reproduce, import, or export such varieties, or use them in the production of hybrids of different varieties for a period of 18 years. Fees are charged to those applying for certificates of protection and the funds are retained by the Department to fund the program.

Plant Variety Protection Workload Data:

	1989 Actual	1990 Estimate	1991 Estimate
Backlog of applications, beginning of year	267	443	443
New applications received	330	260	260
Certificates issued	141	230	260
Applications abandoned	13	30	30
Pending applications, end of year	443	443	413
Number of years to process backlog applications	2.2	2.2	2.1

c. The Research and Promotion Acts. The various Research and Promotion Acts provide for the collection of an assessment from producers to carry out research and promotion activities for beef, cotton, dairy products, eggs and egg products, honey, pork, potatoes, and watermelon. It is the responsibility of AMS to review and approve the budgets and the projects proposed by the research and promotion boards. Each research and promotion activity reimburses AMS for the cost of overseeing these programs.

Research and Promotion Programs
(Dollars in Millions)

	1989 Actual		1990 Estimate		1991 Estimate	
Programs	Assessments Collected	Funds Expended	Assessments Collected	Funds Expended	Assessments Collected	Funds Expended
Beef	$45.1	$43.3	$43.0	$50.0	$43.0	$50.0
Cotton	37.5	24.2	31.1	26.5	39.4	25.3
Dairy	76.8	84.1	77.5	88.8	79.1	90.6
Egg	4.3	4.0	7.2	7.1	7.2	7.2
Honey	2.5	2.2	2.0	3.7 a/	2.4	4.2 a/
Pork	24.7	25.0	25.7	26.0	25.7	26.0
Potato	6.0	6.7	5.9	9.2 a/	6.0	10.5 a/
Total	$196.9	$189.5	$192.4	$211.3	$202.8	$213.8

a/ Includes Targeted Export Assistance
Honey Board: 1990-$500,000; 1991-$1,150,000
Potato Board: 1989-$2,200,000; 1990-$4,000,000; 1991-$5,000,000

The Beef Promotion and Research Act became effective in July 1986. Assessments under the program began October 1, 1986. On May 10, 1988, producers decided on a referendum to continue the program by a vote of 79 percent in favor and 21 percent opposed. Refunds totaling $7,520,000 were mailed by August 25, 1988, to those producers and importers who requested them prior to the referendum. In accordance with the Act, the provision for refunds was terminated upon the Secretary's announcement of the results of the referendum on May 27, 1988.

The Pork Promotion, Research, and Consumer Information Program became effective as part of the 1985 Food Security Act. Assessments under this program began in November 1986. A referendum held September 7 and 8, 1988, determined that this program should be continued with 77.5 percent of voters in favor of its continuation and 22.5 percent opposed to it. The provision for refunds in the Act was terminated on September 27, 1988.

A hearing on the need for a research and promotion program, authorized under the Watermelon Research and Promotion Act of 1985, were held in February and March of 1987. A recommended decision based on hearing evidence, was published on March 7, 1988. After a comment period, the Secretary's decision was issued December 20, 1988, which directed that a referendum be conducted to determine whether the issuance of the proposed order was favored by producers and handlers. A referendum was conducted during February 1989 with a majority of both producers and handlers voting in favor of the proposed order. The order became effective on June 8, 1989. Full implementation of the order is scheduled for March 1990.

The Egg Research and Promotion Rules and Regulations were amended effective October 1, 1989, to establish procedures for obtaining a one-time refund, or pro rata share, of assessments collected and held in an interest-bearing escrow account in accordance with the Egg Research and Consumer Information Act Amendments of 1988. Refunds will be dispersed only if elimination of the refund provision from the Egg Research and Promotion Order is not approved by producers voting in a referendum during the summer of 1990. The amendments also provided for an increase in the rate of assessment from 2.5 cents to 5 cents per 30-dozen case of commercial eggs marketed. Funds available for research and promotion activities in 1990 are estimated to total $7.1 million (after escrow) and are based on a mandatory non-refundable 5-cent assessment program.

The Dairy Promotion and Research Order requires the Board to review the geographic distribution of milk production volume throughout the U.S. and, if warranted, recommend to the Secretary a reapportionment of the regions and/or a modification of numbers from regions to best reflect the geographic distribution of milk production. To reflect changes in milk production patterns in 1987, the Board proposed an amendment to the Order to modify the composition of the Board by adding one Board seat to Region 2 (California) and removing one Board seat from Region 5 (Minnesota, North Dakota and South Dakota). A proposed rule was published in the Federal Register on November 29, 1988, and a final rule amending the Order became effective on May 1, 1989. At the request of AMS' Administrator, the Office of Inspector General conducted an audit of the National Dairy Promotion Program funds. The audit issued on July 18, 1988, made 10 recommendations to correct management weaknesses. These recommendations related to AMS oversight over qualified programs, to the collection of assessments from responsible persons, and to a lack of coordination in national advertising. All recommendations have been resolved.

4. Wholesale Market Development:

Activities in this program are carried out under the authority of the Agricultural Marketing Act of 1946.

The Wholesale Market Development Program conducts research and provides technical assistance aimed at improving food marketing efficiency. It emphasizes the most effective types of facilities needed to market farm products and to distribute food within urban areas and assesses alternative marketing systems and practices. Projects are conducted in cooperation with growers, trade groups, individual food companies, and State and local governments.

Program activities for 1990 are divided among projects initiated in prior years, technical assistance to help implement previous studies, and high-priority new projects from a growing backlog of study requests. Among continuing market center projects, emphasis is focused on studies of potential food center development in the greater Phoenix area; revitalization and expansion of produce market facilities at Benton Harbor, Michigan; and the potential relocation of wholesale meat facilities in Harlem to the Hunts Point Food Center in New York City. Additional work is also underway on cooperative research projects in Florida. These projects emphasize the roles of state farmers' markets and wholesale produce market centers in the distribution of fresh produce; in New York State, dealing with potential applications of central refrigeration technology on wholesale food centers; and in Georgia on alternative locations for quality-enhancing facilities for fresh produce in relation to a state system of farmers' markets.

Technical assistance and followup research to support state and local efforts to implement previous studies is important to the ongoing expansion of the Central New York Regional market at Syracuse; to the continuing development of the Maryland Wholesale Food Center servicing Baltimore and the Mid-Atlantic region; to the relocation and expansion currently underway for the Raleigh, North Carolina State Farmers' Market; and to move forward with locational, financial, and organizational planning for proposed new markets in San Diego, California; Southern New Jersey; and Buffalo, New York.

New food center and/or farmers' market studies which are still in preliminary research stages and will require significant further efforts in 1991 include: Cleveland, Ohio--to assess alternatives to expand and modernize wholesale food facilities and improve market access for Ohio farmers; and Columbia, South Carolina--to evaluate alternatives and assess the feasibility of a major agribusiness and farmers' market complex. Additional requests have also been received for a number of potentially large scale studies as well as several projects more limited in scope. These additional requests are being evaluated and may be initiated consistent with program resources.

Other market development activities planned for 1990 are identified as needed to improve food safety, reduce the cost of marketing and help farmers in assessing alternative marketing opportunities. Activities to assess alternative marketing opportunities include studies of (1) processing, cooling, packaging and test marketing of farm-raised hybrid striped bass in Maryland, (2) catfish marketing in Oklahoma and Kentucky, (3) Shiitake mushroom marketing in Virginia and Wisconsin, (4) certification program for producers of organically-grown fresh fruits and vegetables, (5) production and test shipments of fresh vegetables from Oregon-Washington to Pacific Rim countries, (6) feasibility of establishing a farmers' market in northern Kentucky, (7) feasibility of an alfalfa cubing plant, and (8) centralized marketing of fresh vegetables by 14 small farmer cooperatives constituting the Horticultural Producers Federation. Activities to improve food safety and reduce marketing costs include: (1) universal product code development for variable weight produce, (2) methods and facilities for disinfestation of grapefruit, (3) evaluation of the potential for modularization in the frozen food industry, (4) providing economic engineering assistance to groups seeking to improve handling methods and facilities for grading and packing farm products, and (5) a study of washing broiler transport cages to reduce Salmonella.

Wholesale Market Development Workload Data:

	1989 Actual	1990 Estimate	1991 Estimate
Wholesale market facilities studies completed	5	3	3
Research projects completed	4	6	7

OIG Reports:

#01061-11-At	8/89	Egg Products Inspection (EPI) Program - the audit recommended several actions to improve the effectiveness and efficiency of the EPI program.

MARKETING SERVICES

JUSTIFICATION OF INCREASES AND DECREASES

(1) A net increase of $1,328,000 for market news ($16,366,000 available in 1990) consisting of:

(a) an increase of $443,000 for the 1989 pay raise and $176,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) an increase of $174,000 to offset increased operating costs.

An increase is needed to maintain agency efforts to collect, analyze, and disseminate timely market news information. Resources will be increased to provide the funding necessary to continue current program levels.

(c) an increase of $535,000 to enhance market news activities.

Need for Change. The major role of the market news program is to collect and develop information for dissemination to the public, as well as to other USDA organizations, and state and federal agencies and institutions. Producers, dealers, wholesalers, and agricultural analysts rely on this information for their very livelihoods. The current method of preparing reports requires complete rekeying of many items of information by the market news personnel. The reports are in narrative form with data embedded in the text. There is no current system for storing and retrieving information; each report format has to be prepared individually. Market news personnel manually go through hard copies to retrieve requested information. Information users, both federal and private, now pull data from hard copy reports and rekey it in a form that can be used in analysis. It is estimated that most of the market news information items are rekeyed a total of a hundred times each day by AMS, other USDA users, and the public.

Nature of Change. The database being developed will allow market news personnel to enter the data once and retrieve it many times, in many forms. Reports generated from the system will be in a format that users can use without rekeying; narrative and data will be separated. The creation of this relational database will not only enhance the Market News offices' operations and increase the users' analytical capabilities without rekeying, but will also reduce the chance of error that rekeying introduces.

(2) A net increase of $1,792,000 for inspection and standardization ($13,344,000 available in 1990) consisting of:

(a) an increase of $367,000 for the 1989 pay raise and $157,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) an increase of $164,000 to offset increased operating costs.

An increase is needed to keep commodity grade standards current and to make inspection services available to all who require or request them. Resources will be increased to provide the funding necessary to continue current program levels.

(c) an increase of $1,104,000 to fund increased costs for Egg Products Inspection.

Need for Change. An increase is needed to reduce the risk of foodborne disease outbreaks in the egg industry. Diseases such as Salmonella and new techniques in food processing and preservation, which give rise to previously unrecognized microorganisms, create the need for intensified surveillance of egg products processing. In addition, industry's tendency toward a wider use of pesticides, animal drugs and other chemicals to maintain levels of production necessitates strengthening of surveillance programs to investigate and control the movement of potentially adulterated egg products. Increased surveillance of egg products processing is necessary to meet the requirements of the Egg Products Inspection Act.

Nature of Change. Funding will permit AMS to monitor potential microbiological contamination in egg processing facilities by evaluating utilization of standards for food as established by the Hazard Analysis Critical Control Points (HACCP) system. Under this system identification and assessment of hazards associated with growing, harvesting, processing, marketing, preparation, and use of a given raw material or food product are made at key points in the production process. A surveillance program will be expanded to see if foodborne pathogens of emerging concern are potential problems in egg products. Existing surveillance programs would be strengthened to keep pace with the industry's tendency toward a wider use of pesticides, animal drugs and other chemicals to maintain current levels of production.

(3) A net increase of $15,899,000 for market protection and promotion ($1,838,000 available in 1990) consisting of:

(a) an increase of $46,000 for the 1989 pay raise and $18,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) an increase of $19,000 to offset increased operating costs.

An increase is needed to allow the Agency to provide full services for the market protection and promotion programs. Resources will be increased to provide the funding necessary to continue current program levels.

(c) an increase of $15,816,000 for pesticide residue testing.

Need for Change. This increase is part of a Department-wide food safety initiative in response to consumer and producer concerns over pesticide residue in food. Food safety is a major concern because of the recent attention focused on salmonella, Alar, cyanide on imported grapes and other food contamination issues. There is a need for comprehensive information regarding chemical use on agricultural crops. Nationwide pesticide usage data will allow USDA to develop its ability to proactively deal with public concerns about pesticide usage and will augment Environmental Protection Agency and Food and Drug Administration efforts. USDA costs for the first year of this program are estimated at $25 million and an additional $15 million in subsequent years.

Nature of Change. Agencies within USDA, including AMS, the National Agricultural Statistics Service (NASS), the Economic Research Service (ERS) and the Human Nutrition Information Service (HNIS), will initiate related efforts to develop nationwide pesticide usage data. AMS involvement will focus on providing the information needed to determine actual exposure to pesticides levels in the food supply and to reassure consumers. AMS will work with the States to coordinate a national pesticide monitoring program. The first phase will focus on fresh fruits and vegetables in high-producing States. In subsequent years, efforts will be expanded to include other States or commodities. The States will sample and test commodities within-market distribution channels for pesticide residues. NASS will collect on-farm pesticide use data to support the water quality program and other environmental studies. It will also determine chemicals to isolate in the AMS national residue monitoring program. ERS will analyze the impacts on the producer and consumers of alternative regulations and policies currently in effect for pesticide use. HNIS will estimate the probable pesticide exposure in diets for various segments of the population.

(4) An increase of $61,000 for Wholesale Market Development to offset increased pay costs ($1,623,000 available in 1990).

(a) an increase of $43,000 for the 1989 pay raise and $18,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

Agricultural Marketing Service
Summary of Proposed Legislation

SUMMARY OF INCREASES AND DECREASES - PROPOSED LEGISLATION

	1991 Current Law	1991 Program Changes	1991 President's Request
Market News Service	$17,694,000	-$30,000	$17,664,000
Inspection, Grading and Standardization	15,136,000	-3,895,000	11,241,000
Market Protection and Promotion........	17,737,000	-826,000	16,911,000
Wholesale Market Development...........	1,684,000	--	1,684,000
Conversion Costs.......................	--	+320,000	320,000
Total Available....................	52,251,000	-4,431,000	47,820,000

Explanation of Proposed Legislation:

The Agricultural Marketing Service provides market news information to the agricultural community. Subscription fees are currently charged to cover the cost of postage, printing and handling for all printed commodity reports except for tobacco reports. This proposal would allow user fees to be charged to recover these costs for all commodities.

AMS develops, reviews, and maintains agricultural commodity standards that describe product quality attributes for use in the voluntary grading programs. This proposal would shift the funding source from appropriated to user fees. The cost for commodity standards would be charged to users of the grading programs as a part of the grading fees.

Market development and assistance is provided through economic and statistical analysis of commodity markets for use in the marketing agreements and orders program. The budget includes a proposal to recover costs of this program through user fees.

The request of $320,000 is for leave and other liabilities accrued by the program under appropriated funding. If appropriated funds are not provided, these liabilities would be unfairly shifted to the user fee program.

Agricultural Marketing Service
Marketing Services
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 and Estimated 1990 and 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Alabama	$566,706	12	$575,000	12	$629,000	12
Alaska	6,554	--	7,000	--	8,000	--
Arizona	253,517	7	262,000	7	284,000	7
Arkansas	364,758	8	378,000	8	434,000	9
California	2,047,131	47	2,117,000	49	2,390,000	50
Colorado	369,271	10	382,000	10	415,000	10
District of Columbia	14,047,609	192	13,668,000	180	17,229,000	205
Florida	333,516	9	345,000	9	385,000	9
Georgia	619,824	15	641,000	15	715,000	16
Hawaii	8,987	--	9,000	--	11,000	--
Idaho	72,860	2	75,000	2	81,000	2
Illinois	681,151	18	703,000	18	761,000	18
Indiana	422,061	9	437,000	9	502,000	10
Iowa	2,273,065	54	2,350,000	54	2,653,000	55
Kansas	166,981	4	172,000	5	187,000	5
Kentucky	100,771	3	104,000	3	113,000	3
Louisiana	140,428	3	145,000	4	158,000	4
Maine	104,743	2	108,000	2	123,000	2
Maryland	143,848	4	142,000	4	157,000	4
Massachusetts	175,285	5	181,000	5	196,000	5
Michigan	91,497	2	95,000	2	102,000	2
Minnesota	863,090	20	892,000	20	1,012,000	21
Mississippi	242,938	5	251,000	5	285,000	6
Missouri	827,046	19	850,000	19	938,000	19
Montana	64,774	2	67,000	2	73,000	2
Nebraska	375,441	10	388,000	10	419,000	10
New Jersey	691,059	16	715,000	16	807,000	17
New York	623,175	16	644,000	16	711,000	16
North Carolina	953,413	21	986,000	21	1,130,000	22
Ohio	261,382	6	270,000	6	308,000	6
Oklahoma	168,645	4	174,000	4	188,000	4
Oregon	182,394	4	188,000	4	209,000	4
Pennsylvania	601,411	15	622,000	15	692,000	15
Puerto Rico	36,628	1	38,000	1	44,000	1
South Carolina	521,764	10	538,000	10	582,000	10
South Dakota	129,223	3	133,000	3	144,000	3
Tennessee	1,333,438	32	1,361,000	32	1,459,000	32
Texas	765,570	20	791,000	20	866,000	20
Utah	50,205	1	52,000	1	60,000	1
Virginia	20,607	--	21,000	--	25,000	--
Virgin Islands	7	--	--	--	--	--
Washington	510,563	12	527,000	12	589,000	13
West Virginia	69,485	2	71,000	2	79,000	2
Wisconsin	596,845	14	617,000	14	713,000	14
Wyoming	76,362	2	79,000	2	85,000	2
Undistributed a/	--	--	--	--	13,300,000	--
Total, Available or Estimate	$32,956,028	641	$33,171,000	633	$52,251,000	668

a/ Distribution of obligations for Food Safety Initiative not available until States have been selected for funding.

MARKETING SERVICES

STATUS OF PROGRAM

MARKET NEWS

Current Activities:

The Market News Service provides current, unbiased information on supplies, demand, prices, movement, location, quality, condition, and other market data on farm products in specific markets and marketing areas. This information is supplied to producers, processors, distributors, and others to assist them in the orderly marketing and distribution of farm commodities.

Selected Examples of Recent Progress:

1. Market Information Collected:

During FY 1989, market information on agricultural commodities was collected by 171 Federal market news reporters covering 1,737 markets throughout the United States. More than 30,160 buyers and sellers were interviewed to collect data used in market news reports. Forty-one States shared in the cost of collecting and disseminating this information.

2. Market News Information System:

In FY 1989, AMS began development of a market news database system. This system is designed to enhance the availability and usefulness of market news information by establishing uniformity of data across the six commodity divisions, improving access, and by organizing data to allow for individualized data queries. Development will continue into FY 1990. Completion and implementation is expected in FY 1991.

3. International Cooperation and Reporting:

AMS assists other countries in developing market news programs. Countries sending teams to the U.S. in FY 1989 to review our market news programs included Korea, Japan, New Zealand, and Canada.

AMS has expanded reporting on agricultural commodities being traded between the U.S. and several foreign countries, including Mexico, Canada, the Caribbean Countries, and Chile. These reports provide market information on imported crops to exporters, importers, wholesalers, retailers, and researchers. A memorandum of understanding was signed between Agriculture Canada and the Agricultural Marketing Service to facilitate the exchange of market information.

4. Market News Computerization:

Tobacco market news reporters are utilizing hand-held computers to increase the reliability and accuracy of market news reports. These hand-held computers make it possible to gather and input product grade information, billing documents, and grade certificates at the grading site. The hand-held computers allow for the input and calculation of more data than the manual method. Computers therefore provide an improved representation of the total market activities.

Livestock market news reporters are also utilizing computers for calculating weighted average price and weight of slaughter steers and heifers. Use of the computer has enabled AMS to expand reporting from one marketing area (Kansas direct trade) to five, adding the Texas-Oklahoma Panhandle, Colorado, Eastern Nebraska, and Iowa-South Minnesota trade areas. This expansion has also enabled AMS to compute and report national averages.

INSPECTION, GRADING AND STANDARDIZATION

Current Activities:

AMS administers an egg products inspection program which ensures that all egg products are wholesome, unadulterated, and truthfully labeled. AMS provides continuous in-plant inspection of plants manufacturing egg products, a shell egg surveillance program, and an imported egg products inspection program.

The commodity grading and standardization programs assist in the marketing of agricultural products by establishing and applying standards which reflect relative quality characteristics for a particular commodity, such as taste, color, weight, yield, and physical condition. These standards are used to grade livestock, meat, wool, poultry and eggs, dairy products, cotton, tobacco, and fruits and vegetables as well as other commodities ranging from rabbits to Christmas trees. Certification and acceptance services are available to users interested in ensuring that commodity purchases conform to contract specifications. Grading, certification, and acceptance services are provided on a fee-for-service basis.

Centralized scientific support is provided to the Agency through the newly established commodities scientific support program. This program provides the laboratory diagnostic tests necessary to support the grading of certain commodities. The program is also the focal point within AMS for research applied activities involving innovative technologies to promote food safety and quality, to establish an accredited laboratory program, and to conduct quality assurance audits for laboratories performing analyses on various commodities.

Selected Examples of Recent Progress:

1. During FY 1989 AMS participated in Department-wide responses to food safety issues. These issues included a heptachlor contamination of poultry in Arkansas, cyanide contamination of grapes from Chile, barium carbonate contamination of dairy products, and Alar in apples.

   AMS initiated special chemical residue testing to determine if heptachlor contamination found in Arkansas poultry products extended to egg products processed from shell eggs produced in that region. Results of samples analyzed showed no detectable levels of residue.

   AMS participated with FDA to inspect grapes imported from Chile, including assisting FDA chemists in determining what changes occur in fruit contaminated by cyanide and providing information or referring concerned parties to FDA and EPA. AMS personnel also certified claim documentation verifying disposal of produce for the Chilean government's program to compensate growers, importers, and others for their losses.

   Following news reports of a voluntary recall by a dairy product producer, AMS began testing samples of dairy products for barium content. These tests were requested by dry milk and butter producers. No significant levels of contamination were detected.

   AMS closely monitored the effects of the controversy over the use of the chemical daminozide (Alar) on market demand and prices. The agency worked with FDA, EPA, and other USDA agencies to reassure the public concerning the safety of apples. The Secretary authorized assistance to producers through diversion of approximately 58 million pounds of apples destined principally for food banks and livestock feed. Suppliers to the USDA school lunch purchase program were surveyed to verify that they did not use apples treated with Alar.

2. Egg Products Inspection:

At the end of FY 1989, continuous in-plant inspection was provided to 83 egg products processing plants, three less than in FY 1988. Under the import inspection program, 3.0 million pounds of egg products from Canada and 82,500 pounds from the Netherlands were approved for importation. This represents the first Dutch product imported since the Netherlands was approved for importation of egg products in 1987.

The Egg Products Inspection Act (EPIA) also requires control of the disposition of "restricted eggs" (eggs that are cracked, dirty, incubator rejects, inedible, leaking, or otherwise unfit for human consumption) to ensure that only shell eggs fit for human consumption are available to consumers. Inedible eggs constitute a small proportion of all eggs. Most inedible shell eggs and egg products are used in animal feed and the remainder are destroyed. During FY 1989, the volume of inedible shell eggs and egg products amounted to approximately 6.9 percent of liquid egg production. During the year, approximately 1,668 shell egg handlers and 515 hatcheries were inspected at least quarterly to assure that shell eggs supplied to consumers meet the requirements of the EPIA.

Under the residue monitoring and surveillance programs, egg products were tested for various industrial and environmental chemicals. Over 517 samples were analyzed for a variety of chlorinated hydrocarbons during FY 1989.

The problem of Salmonella Enteritidis in shell eggs continued as a serious human health issue during fiscal year 1989. The mechanism for the transmission of the organism into the egg is unknown and there is limited scientific information available on the subject. Presently, a task force of USDA and Food and Drug Administration (FDA) officials is working on this issue. They have developed a "Voluntary Model State Program for Salmonella Enteritidis Quality Assurance" and distributed it to State Commissioners of Agriculture, other State officials, and egg industry organizations. USDA will provide research and laboratory support and epidemiological assistance. Pursuant to the provisions of the Egg Products Inspection Act, the Department will cooperate with FDA to assure that eggs from infected flocks, once identified, are directed to processing establishments for pasteurization rather than to fresh egg markets.

Fees and Charges in Effect:

Service Performed	FY 1989 Hourly Fee
Overtime Inspection	$20.52
Holiday Inspection	$14.20

3. Grading and Standardization:

a. Cotton Classing:

A total of 14.2 million cotton samples were classed during FY 1989 compared to 13.7 million in FY 1988. Smith-Doxey user fee classing for growers accounted for 13.8 million samples in FY 1989, up from the 13.5 million samples classed in FY 1988. The larger crop in FY 1989 was due to excellent growing conditions and increases in planted acreage resulting from higher cotton prices. Classings for growers during FY 1989 represented about 97 percent of total bales produced.

Ginners or other grower agents were able to access data on cotton classing, or fiber quality, from all twenty classing offices with personal computers via telecommunications. This data was also available to authorized users on computer diskette and tape.

High volume instrument (HVI) classing was carried out in 16 of the 20 classing office territories. A total of 6.1 million bales, or 44% of all samples, were classed on HVI during FY 1989, which was up from 5.9 million bales in FY 1988. In FY 1989, 132 HVI systems were used to meet program needs.

AMS was also successful in obtaining a revised Universal Cotton Standards Agreement in order to give all segments of domestic and foreign cotton industries representation in the process of approving cotton grade standards and recommending changes in these standards to the Secretary. The Secretary appointed a national advisory committee on Cotton Standards which served at the 23rd Universal Cotton Standards Conference in June.

In FY 1989, the Agricultural Research Service (ARS), at the request of AMS, continued a study to evaluate light spotted cotton grades versus white cotton grades. This study was conducted at the request of growers because the percentage of light spotted cotton produced in the United States has increased in recent years. The purpose of the study is to determine why this is occurring and whether differences in processing efficiency and fiber quality justify maintaining two grade ranges. A preliminary report on the quality differences was presented to the National Advisory Committee on Cotton Marketing in August. Over the next year, ARS will continue this study on bales of cotton from the 1989 crop.

Fees and Charges in Effect:

Service Performed	FY 1989 Fees a/ (7/1/89 - 6/30/90)
Cotton Grading	$1.23 per bale for hand classing $1.73 per bale for instrument classing

a/ Five-cent per bale discount if the producer was billed through a voluntary central agent (e.g., cotton ginners).

b. Tobacco Grading:

Approximately 98 percent (1.4 billion pounds) of all tobacco produced in FY 1989 was graded by Federal tobacco inspectors and sold at auction markets. In addition, about 21 million pounds of tobacco pledged as collateral by growers under the Commodity Credit Corporation loan program were reinspected (permissive inspection) by AMS.

The Dairy and Tobacco Adjustment Act of 1983 requires that all tobacco (except cigar and oriental types) imported into the United States be inspected to ascertain the type and quality of imported tobacco. The imported tobacco inspection program was initiated on July 13, 1984. During FY 1989, approximately 188 million pounds of imported tobacco were inspected. The imported tobacco pesticide testing and certification program was initiated on September 2, 1986. This program requires that all flue-cured and burley tobacco offered for importation into the United States be free of prohibited pesticides. Approximately 183 million pounds of flue-cured and burley imported tobacco were tested during FY 1989.

Fees and Charges in Effect:

Service Performed	FY 1989 Fee	
Permissive Inspection	Regular time	$22.30 per hour
	Overtime	$26.60 per hour
	Sundays and Holidays	$33.35 per hour
Tobacco Grading	$.67 per hundred pounds	
Imported Tobacco Grading	$.40 per hundred pounds	
Imported Tobacco Pesticide Testing and Certification:		
A. Self-Certification (If importer certifies that tobacco is within pesticide residue tolerance)	$.35 per hundred pounds	
B. Non-Certification (If importer does not certify that the tobacco is within pesticide residue tolerance)	$.70 per hundred pounds	

c. Poultry and Egg Grading:

Approximately 95 percent of poultry grading services are provided on a resident basis. In most of these instances, a full-time grader is stationed at the plant requesting service. The remaining 5 percent of the services are provided on a nonresident (lot grading) basis. During FY 1989, resident service was provided in 188 poultry plants and 180 shell egg plants. A total of 14.3 billion pounds of poultry and 1.6 billion dozen shell eggs were graded during the year. This represents about 90 percent of the turkeys slaughtered, over 60 percent of the broilers slaughtered, and 39 percent of the shell eggs produced in the U.S., excluding eggs used for breaking and hatching.

Fees and Charges in Effect:

Service Performed	FY 1989 Hourly Fee
Non-Resident Plant:	
Voluntary Grading:	
Regular Time	$24.12
Saturday, Sunday, Holiday	$25.92
Resident Plant	$18.58-$25.59 *

* Depending on the volume of product handled in the plant.

d. Meat Grading and Certification:

During FY 1989, meat grading and certification services were provided to approximately 900 meat packing, processing, and other food establishments nationwide. A total of 13.9 billion pounds of red meat was graded during the year. This figure represents 77.3 percent of the steers and heifers, 94 percent of the lamb, and 11.3 percent of calves commercially slaughtered in the U.S. This is a 1.1 billion pound increase in grading over FY 1988, and results primarily from the continuing acceptance of the Select grade and a major change in the grading regulations. The change in grading regulations implemented uncoupling of quality and yield grading in April 1989, which allows meat packers to request quality grading, yield grading or both. Combined, these changes have resulted in a 10.3 percent increase in beef graded. An additional 800 million pounds of meat and meat products were certified for compliance with contract specification for the Department of Defense, exports, Federal school lunch programs, and other large volume meat purchasers such as State and local governments. This figure represents a 14.3 percent increase in total certification from FY 1988 and primarily resulted from an increase in Federal purchases of meat and meat products. The increase in the Federal Purchase Programs was primarily the result of purchases for drought relief, and the Temporary Emergency Food Assistance Program authorized by the Hunger Prevention Act of 1988.

Fees and Charges in Effect:

Service Performed	FY 1989 Hourly Fee
Commitment Base Grading	$28.80
Noncommitment Base Grading	$31.20
Overtime Grading	$36.80
Holiday Grading	$57.60

e. Livestock Grading:

In FY 1989, AMS inspected and graded, according to contract specifications, approximately 46 million pounds of livestock delivered to settle futures contracts for the Chicago Mercantile Exchange and the Mid-America Commodity Exchange. Livestock delivered included live slaughter steers and live slaughter hogs.

Fees and Charges in Effect:

Service Performed	FY 1989 Hourly Fee
Base Grading	$29.40
Overtime Grading	$32.80
Holiday Grading	$58.80

f. Processed Fruit and Vegetable Grading:

In FY 1989, 8.7 billion pounds of processed fruits and vegetables were graded at 336 processed products plants.

Further progress was made during FY 1989 to achieve the automation of activities in the processed products grading program. The program has implemented electronic transfer of administrative documents. Faster transfer of information allows faster service to applicants. Electronic entry and transmission of documents reduces the opportunities for errors and reduces the cost of data entry and correction. Direct electronic access to the Department's National Finance Center database by the 22 field offices will be implemented in FY 1990. A data base for U.S. grade standards is also being developed.

Fees and Charges in Effect:

Service Performed	FY 1989 Hourly Fee		
	Base	Holiday	Overtime
Lot Inspection	$29.00	$58.00	$34.50
Yearly Contract (in-plant)	$22.00	$44.00	$27.50
Requested Additional Graders (in-plant)	$27.00	$54.00	$32.50
Seasonal Contract (in-plant)	$27.00	$54.00	$32.50

g. Fresh Fruit and Vegetable Grading:

Grading services for fresh fruits and vegetables are available at shipping points and in receiving markets anywhere in the U.S. and in Puerto Rico. In FY 1989, approximately 74.6 billion pounds of fresh fruits, vegetables, and specialty crops were graded. This grading was accomplished by AMS with the assistance of 5,500 Federally-supervised and licensed State employees.

Fees and Charges in Effect:

Service Performed	FY 1989 Fees	
Quality and Condition Inspections	$42.00	Half-carlot or less
	$50.00	More than half-carlot up to full-carlot
	$100.00	Maximum per carlot when more than one product is involved
Condition Only Inspections	$38.00	Half-carlot or less
	$42.00	More than half-carlot up to full-carlot
	$84.00	Maximum per carlot when more than one product is involved
Shelled Pecans and Other Nuts	$1.50	Per ton. ($24.00 minimum fee)
Farmers' Stock Peanuts (in lieu of other fees)	$4.00	Per ton
Hourly Rate	$25.00	Per hour
Overtime Charges	$12.00	Per hour additional to other charges
Small Package Fees (institutional purchases)	$6.25	1 to 25 packages
	$8.75	26 to 50 packages
	$14.00	51 to 150 packages
	$18.00	151 to half-carlot

h. Dairy Products Grading:

Dairy products grading, laboratory analysis, and plant inspections assure the purity and quality of dairy products. An AMS grade is required on all products sold to the Commodity Credit Corporation under the dairy price support program. Upon request, AMS also performs grading work for processors with respect to products sold in commercial channels. In FY 1989, AMS graded approximately 2.0 billion pounds of dairy products, and made approximately 1,800 dairy plant inspections to assure sanitation of processing facilities.

A decrease in the dairy grading workload in FY 1989 resulted in the closing of the dairy's Syracuse office in December 1988 and its Minneapolis and Fresno offices in September 1989. Scheduling of Dairy grading field work is now being coordinated from the Glen Ellyn, Illinois regional office. In addition to reducing field personnel, the program also initiated administrative changes to reflect the decline in workload; including reducing headquarters staff, reducing travel, and delaying equipment purchases.

Fees and Charges in Effect:

Service Performed	FY 1989 Hourly Fee
Continuous Resident Service	$32.00
Product Grading	$36.00
Night Differential Product Grading	$39.60
Holiday, Saturday, Sunday (product grading)	$54.00

1. Standardization:

Domestic and international standards are developed for use in grading, acceptance and certification services for poultry, eggs, meat, dairy products, fresh and processed fruits and vegetables, cotton, tobacco, naval stores, wool, mohair, and livestock. In FY 1989, 5 standards were revised, including one for dairy products, two for fresh fruit and vegetable products, and two for livestock. No new standards were developed.

MARKET PROTECTION AND PROMOTION

Current Activities:

AMS administers several laws under this activity, including the Agricultural Marketing Act of 1946; the Federal Seed Act; the Plant Variety Protection Act; research and promotion acts for beef, cotton, dairy products, eggs and egg products, honey, pork, watermelon, and potatoes; the Export Apple and Pear Act; and the Export Grape and Plum Act. These laws regulate various marketing activities and the administration of each includes one or more of the following: issuance, suspension or revocation of licenses or registration; collection and testing of seed samples; audits of books and records; investigation of complaints and violations; settlement of disputes; and legal protection to developers of new varieties of plants which reproduce sexually.

Selected Examples of Recent Progress:

1. Federal Seed Program:

   a. Federal Seed Act:

      AMS has cooperative agreements with each State to regulate interstate commerce of agricultural and vegetable seeds with regard to labeling. Under these agreements, the States refer apparent violations of the Federal Seed Act to AMS for verification and appropriate action. In cooperation with State agencies, AMS conducted field tests on over 2,300 samples at 8 different locations to determine trueness-to-variety of seed in interstate commerce. In FY 1989, 1,045 new complaints were received from 32 States. One hundred and five Federal Seed Act cases were settled administratively during FY 1989 with penalty assessments totaling $31,725. The penalty assessments ranged from $150 to $10,675.

      To promote uniformity in testing and inspection AMS conducted two regional Seed Analyst Workshops and four Seed Inspector Workshops.

   b. Agricultural Marketing Act:

      AMS offers seed inspection and certification services to interested parties for a fee. Most of the users of this service are exporters and importers of seed. During FY 1989, over 1,680 sample seed analysis certificates were issued.

2. Plant Variety Protection Act:

   The Plant Variety Protection Act (PVPA) is a voluntary program providing legal protection to developers of new varieties of plants which reproduce sexually. Protection under the Act is currently given to varieties of approximately 100 species of plants. Each developer of a new variety is assessed a fee of $2,400 to cover the cost of filing, searching, issuing, informing the public, and maintaining plant variety protection certificates. Amendments to the Act were passed December 22, 1987, which allowed USDA to retain collected fees to fund the program. Prior to this, fees were placed in the General Fund of the Treasury. The fees for protection were increased from $2,000 to $2,400 on April 20, 1989.

   A total of 330 applications for protection of new varieties of seed were received in FY 1989. A total of 443 applications, including some from the previous year, were pending action at the end of FY 1989. Searches were conducted on 154 applications to determine whether the plant constituted a new variety and 141 certificates of protection were issued. A total of 2,210 certificates were in force at the end of FY 1989.

3. Research and Promotion Programs:

   AMS provides oversight and direction to a number of industry-funded research and promotion programs. Industry research and promotion boards collect assessments from producers to carry out programs aimed at strengthening the demand for and improving the quality of beef, cotton, dairy products, eggs and egg products, honey, pork, and potatoes. It is the responsibility of AMS to review and approve the budgets and projects proposed by the boards. The industry reimburses AMS for the administrative costs of these programs.

The Beef Promotion and Research Act of 1985 authorized the establishment, financing and operation of a national beef promotion and research program. The Beef Promotion and Research Order, which promotes more use of beef in the United States as well as in foreign countries, became effective in July 1986. In 1989, the compliance rate for this program was estimated to be over 97 percent. Over $5.0 million of the $83.1 million assessments were collected from importers. The National Beef Promotion and Research program received $45.1 million of the assessments while qualified State beef council programs received the remaining $38 million.

The Pork Promotion, Research, and Consumer Information Act of 1985 authorized the establishment of a national, industry-funded and operated pork promotion program. The Pork Promotion, Research, and Consumer Information Order, which strengthens the position of pork in the marketplace as well as in foreign markets, became effective in September 1986. Over $2.1 million of the $24.7 million assessments collected in 1989 were from importers.

The Honey Research, Promotion and Consumer Information Act of 1985 authorizes a program to strengthen the position of honey in the marketplace. An order effective under the Act which provides for the establishment of the National Honey Board was issued by the Secretary of Agriculture on July 21, 1986. The Board is funded by an assessment of one cent per pound on all honey entering U.S. channels of commerce. In FY 1989, the Board received approximately $2.5 million in assessments and refunded approximately $240,000. During FY 1989 the Board hired marketing representatives in three overseas areas--Western Europe, the Middle East, and Japan. In conjunction with Cornell University and the Economic Research Service of USDA, the Board began in 1988 a major economic study of the U.S. honey industry. In 1989 the first installment of that research placed the value of bee pollination of U.S. crops at $10 billion.

The U.S. Customs Service of the Treasury Department collects assessments due on imported cattle, beef, beef products, porcine animals, pork, pork products, and honey for AMS. These assessments are authorized under the Beef, Pork, and Honey Research and Promotion Acts.

The American Egg Board, the Agricultural Marketing Service, the Agricultural Research Service, and the Human Nutrition Information Service collaborated on a two-phase nationwide testing program to determine the cholesterol value of shell eggs. Study results were released by the Department May 15, 1989, and showed the cholesterol content to be 213 milligrams per average large egg. This is about 22 percent less than the egg data published in 1976--which was 274 milligrams. The new value will be incorporated in a revision to Agriculture Handbook 8-1 in FY 1990. An immediate positive result for the egg industry was that the American Heart Association changed its recommendation for egg consumption from three egg yolks per week to four.

Amendments to the Egg Research and Promotion Order were issued effective January 1, 1989, to eliminate the producer refund provision. The mandatory assessment program is authorized by amendments to the Egg Research and Consumer Information Act and will be in effect for 18 months. A producer referendum on the amended order will be conducted soon after the end of the 18-month period.

The Dairy and Tobacco Adjustment Act of 1983 authorized a national program for dairy product promotion, research, and nutrition education as part of a comprehensive strategy to reduce milk supplies and increase consumption of milk and dairy products. This self-help program is funded by a mandatory 15-cent per hundredweight assessment on all milk produced in the contiguous 48 states and marketed commercially by dairy farmers. The Act provides that dairy farmers can receive a credit of up to 10 cents per hundredweight for contributions to ongoing qualified regional, State, or local dairy product promotion or nutrition education programs. The program is administered by a National Dairy Promotion and Research Board. The Board's revenue from producer assessments in its 1989 fiscal year represented $76.8 million of the approximately $215 million generated by the 15-cent per hundredweight assessment. The Board reports collections running at a rate of 98-99 percent of total U.S. milk marketings. Nearly 90 percent of the dairy farmers voting in an August 1985 referendum required by the Act approved continuation of the program. USDA is required to submit to Congress an annual report describing activities conducted under the Dairy Promotion and Research Order, an accounting of funds collected and spent, and an independent analysis of the effectiveness of the program. The most recent report was submitted on June 30, 1989.

Since its establishment in 1973, the Potato Board, as authorized by the Potato Research and Promotion Act of 1971, has continuously carried out a coordinated program of research, development, advertising and promotion. In FY 1989 the Board collected almost $6 million in assessments and refunded over $1 million. The Potato Board was especially successful in promoting french fry sales in the Pacific Rim countries with the help of Targeted Export Assistance funds from the Foreign Agricultural Service of USDA. The nutrition emphasis in the Board's advertising was completed in FY 1988. This program is credited with having instilled a new appreciation for the potato as a wholesome vegetable among U.S. consumers. In 1989, a convenience theme was inaugurated in Board advertising.

The Watermelon Research and Promotion Act authorizes the establishment of an effective, continuous, and coordinated program of research, development, advertising, and promotion. This Act is designed to strengthen the watermelon's competitive position in the marketplace, and establish, maintain, and expand domestic and foreign markets for watermelons produced in the United States. A hearing on the need for a research and promotion program, authorized under the Watermelon Research and Promotion Act of 1985, was held in February and March of 1987. A recommended decision on a proposed plan was issued in March 1988. An industry referendum with favorable producer and handler support for a watermelon research and promotion program was conducted during February 1989. The Watermelon Research and Promotion Plan was issued in June 1989. Full implementation of the Plan is scheduled for March 1990.

	FY 1989	
	Assessments Collected	Refunds to Producers
	(Millions of Dollars)	
Beef	45.1	$0.0
Pork	24.7	0.0
Cotton	37.5	13.0
Egg	4.3	0.0
Honey	2.5	0.2
Potatoes	6.0	1.1
Dairy	76.8	0.0

WHOLESALE MARKET DEVELOPMENT

Current Activities:

The Wholesale Market Development Program promotes improvement of wholesale and farmers' market facilities, reduces the cost of marketing and the spread between farm and consumer prices, and conducts other specialized research in assessing alternative marketing systems and practices.

In FY 1989, major wholesale food center studies were underway in the greater Phoenix, Arizona area to determine the need and develop preliminary plans for a regional food distribution center; and in the greater Baltimore, Maryland area, to document the current importance and assist in long range planning for further development of the Maryland Wholesale Food Center. A research report on the Maryland study was published in cooperation with the State's Food Center Authority. Needs were also assessed and preliminary facility plans developed, in cooperation with Michigan State University, to modernize and expand the existing produce market at Benton Harbor, Michigan. Additional cooperative studies were underway with the University of Georgia, to develop new methods for use in assessing alternative locations for farmers' market facilities using the Georgia State market system as a prototype, and with the New York Department of Agriculture concerning the design of central refrigeration facilities for wholesale food centers using the proposed redevelopment of the Central New York Regional Market at Syracuse as a model. Recently initiated research in New York City focused on the feasibility of developing specialized wholesale meat facilities on the Hunts Point Food Center to replace obsolete facilities in Harlem. Work continued on a cooperative study of the movement of produce and ornamentals from Florida to major wholesale food centers throughout the United States. Research was completed and results published concerning farmers' market development in the Piedmont area of South Carolina.

Other activities supporting wholesale marketing and marketing systems underway in FY 1989 included: identification of alternative marketing opportunities for farmers; Universal Product Code development for variable weight produce; a market analysis and feasibility study of an alfalfa cubing plant; alternative methods for disinfestation of grapefruit; centralized marketing of fresh vegetables by 14 small farmer cooperatives constituting the Horticultural Producer Federated Association; developing a commercial fresh vegetable industry in the Washington-Oregon region to export fresh vegetables to the Pacific Rim countries; feasibility of establishing farmers' market facilities in northern Kentucky; instrumentation of tobacco grading; marketing farm-raised catfish form Oklahoma and Kentucky, and striped bass from Maryland; consumer testing of Shiitake mushrooms; certification programs for producers of organically grown fresh fruits and vegetables; evaluations of handling methods for fresh broccoli and the potential for modularization in the frozen food industry.

AGRICULTURAL MARKETING SERVICE

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Payments to States and Possessions:

For payments to departments of agriculture, bureaus and departments of markets, and similar agencies for marketing activities under section 204(b) of the Agricultural Marketing Act of 1946 (7 U.S.C. 1623(b)). [$1,250,000] $942,000.

PAYMENTS TO STATES AND POSSESSIONS

Appropriation Act, 1990	$1,250,000
Budget Estimate, 1991	942,000
Decrease in Appropriation	-308,000

Adjustments in 1990		
Appropriation Act, 1990	$1,250,000	
Gramm-Rudman-Hollings Reduction (P.L. 99-177)	-14,000	
Adjusted base for 1990		1,236,000
Budget estimate, 1991		942,000
Decrease from adjusted 1990		-294,000

PROJECT STATEMENT
(On basis of adjusted appropriation)

Project	1989 Actual	1990 Estimated	Decrease	1991 Estimated
Payments for marketing service work under Section 204(b) of the Agricultural Marketing Act of 1946	$942,000	$1,236,000	-$294,000 (1)	$942,000
Total, available or estimate	942,000	1,236,000	-294,000	942,000
Gramm-Rudman-Hollings Reduction	--	14,000		
Total appropriation	942,000	1,250,000		

EXPLANATION OF PROGRAM

The Federal-State Marketing Improvement Program is authorized by Section 204(b) of the Agricultural Marketing Act of 1946. This legislation also grants the U.S. Department of Agriculture authority to establish cooperative agreements with State Departments of Agriculture or similar State agencies. These agreements make possible joint efforts to improve the efficiency of the agricultural marketing chain. The States perform the work or contract it to others, and must contribute at least half of the cost of the projects.

Payments are made to State marketing agencies to: identify and market test alternative farm commodities; determine methods of providing more reliable market information, and develop better commodity grading standards. This program has covered many types of projects, such as electronic marketing and agricultural product diversification. The general themes of the current projects include the adaptation of new technology to the marketing of farm products, and seeking new outlets for existing farm produced commodities.

JUSTIFICATION OF INCREASES AND DECREASES

(1) A decrease of $294,000 for the Payments to States and Possessions program ($1,236,000 available in 1990).

Need for Change. Federal funds have been provided to States to pay up to half the cost of pilot-testing cooperatively sponsored projects proposed by the States to solve local marketing problems. Funding is requested at a level equal to that provided in previous years.

Nature of Change. Federal matching funds will be provided to assist States in funding projects to deal with specific State or local marketing problems.

Agricultural Marketing Service
Payments to States and Possessions
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS
1989 and Estimated 1990 and 1991

	1989	1990	1991
Alabama	$30,000		
Arkansas	47,445		
Colorado	100,000		
Florida	50,000		
Idaho	60,000		
Kansas	30,000		
Kentucky	26,744		
Louisiana	20,000		
Maryland	86,934		
Massachusetts	87,595		
Michigan	60,000		
Missouri	45,000		
Nebraska	56,000		
New Jersey	23,850		
North Dakota	63,444		
Texas	47,320		
Vermont	15,000		
Virginia	39,546		
Wyoming	53,122		
Total, Available or Estimate	$942,000	$1,236,000 a/	$942,000 a/

a/ Distribution of obligations by State not available until projects have been selected for funding in 1990 and 1991.

PAYMENTS TO STATES AND POSSESSIONS

STATUS OF PROGRAM

Current Activities:

Through cooperative agreements with State Departments of Agriculture, the Federal-State Marketing Improvement Program supports joint projects aimed at improving the efficiency of the agricultural marketing chain. The States contribute at least half of the cost of such projects. The work is performed by State personnel, employees of land grant universities, or is contracted out to private industry.

Selected Examples of Recent Progress:

During FY 1989, a total of 27 projects involving 19 States were approved. In addition to the $942,000 provided by AMS for these projects, the States contributed over $1.5 million. Examples of funded projects are as follows:

Federal Funding	Participating State	Project
$ 100,000	Colorado	Development of Lamb Classification Systems to Facilitate Marketing Based on Lean Content of Carcass: Determine the effects of frame size, breed type, and system of dietary management on costs of production and carcass cutability and value.
60,000	Idaho	Trout Marketing: Determine perceptions of trout distributors, retailers, and restaurant managers about consumers wants and identify possible creative marketing strategies to improve trout markets.
15,000	Kansas	Pilot Project for a Hay Market and Price Discovery Program: Develop an electronic hay marketing program which will provide a data base listing producers with hay for sale, including nutritional information.
16,934	Maryland	DELMARVA Produce - From Shore to Shore: Coordinating the shore to shore program, with the intent of expanding the amount of shelf space used for DELMARVA products in local stores.
56,000	Nebraska	International Market Study for Beef Breeding Cattle and Swine: Conduct domestic and international marketing research to determine scope and size of potential markets and sources of marketing assistance.
34,400	North Dakota	Ethanol Marketing/Education: Conduct market surveys to determine current ethanol consumption, production costs, problem areas, and public perception in order to develop programs to meet the needs of the industry.

PERISHABLE AGRICULTURAL COMMODITIES ACT FUND

Appropriation Act, 1990 (from receipts)	$5,675,000
Budget Estimate, 1991 (from receipts)	5,675,000
Change in Appropriation	--

PROJECT STATEMENT
(On basis of available funds)

Project	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
Licensing dealers and handling complaints	$5,517,546	125	$5,423,000	129	+$252,000	$5,675,000	129
Unobligated balance available start of period	-844,734	--	-895,774	--	-252,000	-1,147,774	--
Unobligated balance available end of period	895,774	--	1,147,774	--	--	1,147,774	--
Total available or estimate	5,568,586	125	5,675,000	129	--	5,675,000	129

OBLIGATION LEVELS
(On basis of available funds)

Item	1989 Actual	1990 Estimated	1991 Estimated
Appropriation (from receipts)	$5,568,586	$5,675,000	$5,675,000
Unobligated balance available, start of period	844,734	895,774	1,147,774
Total available	6,413,320	6,570,774	6,822,774
Total obligations	-5,517,546	-5,423,000	-5,675,000
Unobligated balance available, end of period	895,774	1,147,774	1,147,774

EXPLANATION OF PROGRAM

PERISHABLE AGRICULTURAL COMMODITIES ACT

This program is carried out under the Perishable Agricultural Commodities Act and the Produce Agency Act.

These Acts are designed to: (1) protect producers, shippers, distributors and retailers from unfair and fraudulent practices in the marketing of perishable agricultural commodities; and (2) prevent the unwarranted destruction or dumping of farm products handled for others.

Commission merchants, dealers, brokers, and retailers engaged in the business of handling fresh or frozen fruits and vegetables in interstate or foreign commerce must be licensed under the Perishable Agricultural Commodities Act (PACA). Buyers and sellers must fulfill the terms of contractual agreements, and buyers must pay promptly for their purchases.

Traders who have been found in a formal proceeding to have violated the prompt payment provision of this Act are penalized by restrictions on trading in the industry for a specific period of time. When eligible to resume trading, they are required to post surety bonds before resuming operations. False or misleading statements, misbranding, and similar violations are prohibited.

To increase protection and avert financial losses to growers and licensed firms, the Perishable Agricultural Commodity Act was amended in May 1984 to create a statutory trust. This statutory trust provision requires traders to have sufficient assets on hand to meet their obligations to fruit and vegetable suppliers. Sellers of fruits and vegetables who have not been paid are secured under this legislation until full payment is made. These sellers are also secured in the event the buyer files for bankruptcy or becomes insolvent. This amendment also improves the timeliness of payment.

Complaints of violations are investigated and violations dealt with by: (1) informal agreements between the two parties; (2) formal decisions involving payment of reparation awards; and/or (3) suspension or revocation of license and/or publication of the facts. Any interested party or group may request AMS assistance in settling disputes under the Perishable Agricultural Commodities Act.

License fees are deposited into a special fund and are used to meet the costs of administering these Acts. The annual PACA license fee is $300, plus $150 for every branch or business facility above nine, up to a maximum annual fee of $3,000.

Perishable Agricultural Commodities Act Workload Data:

	1989 Actual	1990 Estimate	1991 Estimate
Licensing Activities:			
Licenses renewed	18,735	18,800	18,800
New licenses issued	1,961	2,000	2,100
In effect, end of year	15,486	15,500	15,525
Actions Completed: *			
License actions	18,735	18,800	18,800
Reparation actions	54,000	54,500	55,000
Disciplinary actions	285	300	325
Personal investigations	2,135	2,200	2,250
Statutory Trust actions	76,000	90,000	100,000
Misbranding actions	621	650	675
Total Actions Completed	151,776	166,450	177,050
Reparations: (Dollars in Thousands)			
Awarded - Formal orders	$9,487	$9,500	$10,000
Payments - Amicable settlements	11,900	12,500	13,000
Total Reparations	$21,387	$22,000	$23,000
Statutory Trust			
Notices Filed	76,000	90,000	100,000
Refunds to sellers (Dollars in Millions)	$325	$400	$425

* Statutory Trust Notices included in Actions Completed.

Agricultural Marketing Service
Perishable Agricultural Commodities Act-
Geographic Breakdown of Obligations and Staff-Years
1989 and Estimate 1990 and 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
California	$566,212	14	$556,000	14	$582,000	14
District of Columbia...	3,490,294	75	3,431,000	78	3,590,000	78
Illinois...............	436,299	11	429,000	11	449,000	11
New York...............	502,533	12	494,000	13	517,000	13
Texas..................	522,208	13	513,000	13	537,000	13
Total, Available or Estimate............	$5,517,546	125	$5,423,000	129	$5,675,000	129

PERISHABLE AGRICULTURAL COMMODITIES ACT

STATUS OF PROGRAM

Current Activities:

The Perishable Agricultural Commodities Act (PACA) and the Produce Agency Act, both funded by annual license fees, are designed to: (1) protect producers, shippers, distributors, and retailers from loss due to unfair and fraudulent practices in the marketing of perishable agricultural commodities; and (2) prevent the unwarranted destruction or dumping of farm products handled for and on behalf of others.

Commission merchants, dealers, and brokers handling fresh and frozen fruits and vegetables in interstate and foreign commerce require a PACA license. Violations of the Act are investigated and result in: (1) informal agreements between the two parties; (2) formal decisions involving payments to injured parties; or (3) suspension or revocation of licenses and/or publication of the facts.

Selected Examples of Recent Progress:

1. Perishable Agricultural Commodities Act:

   a. Amendment to the PACA:

   The Perishable Agricultural Commodities Act was amended August 2, 1988, to increase the statutory ceiling on license fees to $400, plus $200 for each branch or additional business facility in excess of nine. The aggregate annual fee cannot exceed $4,000. The amendment also requires that the Secretary establish an industry advisory committee. The committee was established in FY 1989 and has held three meetings. A final report on its findings and recommendations is due May 1, 1990.

   b. Informal Reparation Complaints:

   During FY 1989, over 47,000 inquiries were received from the produce industry seeking advice concerning disputes. The assistance rendered enabled many traders to avoid marketing problems which could result in the filing of complaints under this law.

   There were 3,852 new reparation cases filed in FY 1989. These cases resulted in informal settlements of approximately $12 million to PACA licensees and unlicensed growers. Seventy-six administrative actions were instituted for Act violations.

   c. Trust Legislation:

   In an attempt to avert financial losses to growers and licensed firms, the produce industry, in cooperation with AMS, proposed legislation that amended the PACA to provide increased protection to sellers of produce. This amendment became law on May 7, 1984. The legislation created a statutory trust for perishable agricultural commodities for the benefit of sellers who have not been paid. This places sellers of fruits and vegetables in a secured position in the event a buyer files for bankruptcy or becomes insolvent, and also improves the timeliness of payments. Regulations allowing administration of Trust provisions became effective December 20, 1984. Approximately 76,000 notices were filed by unpaid sellers to protect their rights to Trust assets in FY 1989, a 38% increase over the 55,000 notices filed in FY 1988. Over $300 million had been returned to these claimants by the end of FY 1989.

   d. Formal Reparation Complaints:

   In FY 1989, there were 1,049 decisions and orders issued by the Judicial Officer. Reparations amounting to $9.5 million were awarded in 781 of the decisions.

AGRICULTURAL MARKETING SERVICE

The estimates include proposed changes in the language of this item as follows (new language underscored: deleted matter enclosed in brackets):

Limitation on Administrative Expenses

> Not to exceed [$37,962,000] $40,162,000 (from fees collected) shall be obligated during the current fiscal year for administrative expenses: Provided, That if crop size is understated and/or other uncontrollable events occur, the Agency may exceed this limitation by up to 10 percent with notification to the Appropriation Committees.

Limitation on Administrative Expenses

Appropriation Act, 1990	$37,962,000
Budget Estimate, 1991	40,162,000
Increase in Limitation	+2,200,000

The increase of $2,200,000 in the limitation on administrative expenses is needed to fund increased operating costs in 1991.

This change proposes additional language which will allow the Agency to exceed the limitation by up to 10 percent upon notification of the Appropriation Committees. This provision would only be implemented if the limitation would not be sufficient to allow for all commodities to be graded due to unanticipated increased crop production, a higher level of tobacco imports, or the occurrence of other uncontrollable factors, such as increases for pay costs, FERS, health benefits, and per diem. This limitation applies to the tobacco and cotton grading programs, from which all costs are paid by the users of the service.

PASSENGER MOTOR VEHICLES

The 1991 Budget Estimates propose the purchase of five replacements and three additional motor vehicles.

The estimated number of passenger motor vehicles available for 1991 are the minimum necessary to maintain essential services in AMS programs. These cars are used to provide the following necessary services: (1) traveling to places which in most cases are not accessible by common carriers, such as farms, market terminals, offices of product dealers and truckers, processing plants, canneries, stockyards, cotton gins, and compress operators; (2) carrying special grading and testing equipment used for inspecting and grading commodities and for performing other work required under the Agricultural Marketing Act of 1946; U.S. Cotton Standards Act; Cotton Statistics and Estimates Act; Tobacco Inspection Act; and Dairy and Tobacco Adjustment Act; and (3) carrying boxes of cotton standards types used in classing work and demonstration at farmers' meetings.

Additional passenger motor vehicles. Three additional passenger motor vehicles are requested for use in the commodity scientific support program. The commodity scientific support program conducts laboratory activities which involve the collection of commodity samples for testing. These commodity samples must be transported from field sites to regional laboratories. It is more cost-effective for the government to provide cars to transport graders to collect samples than to pay expenses incurred for the use of a private car.

The regional offices for the commodity scientific support program are located in Chicago, IL, and Gastonia, NC. Thus, vehicles used in this program would be based in these cities.

Replacement of passenger motor vehicles. Replacement of five of the 62 vehicles now in operation is proposed. All vehicles proposed to be replaced are expected to have mileage over 60,000 or will be more than six years of age.

The age and mileage data for passenger motor vehicles on hand as of September 30, 1989, are as follows:

Age Data

Age-Year Model	Number of Vehicles	Percent of Total
1983 or older	7	11
1984	3	5
1985	10	16
1986	3	5
1987	3	5
1988	30	48
1989	6	10
Total	62	100

Mileage Data

Lifetime Mileage	Number of Vehicles	Percentage of Total
80-100	8	13
60-80	7	11
40-60	6	10
20-40	27	43
Under 20	14	23
Total	62	100

FUNDS FOR STRENGTHENING MARKETS, INCOME, AND SUPPLY (SECTION 32)

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Funds For Strengthening Markets, Income and Supply (Section 32):

> Funds available under section 32 of the Act of August 24, 1935 (7 U.S.C. 612c) shall be used only for commodity program expenses as authorized therein, and other related operating expenses, except for: (1) transfers to the Department of Commerce as authorized by the Fish and Wildlife Act of August 8, 1956; (2) transfers otherwise provided in this Act; and (3) not more than [$8,007,000] $8,526,000 for formulation and administration of Marketing Agreements and Orders pursuant to the Agricultural Marketing Agreement Act of 1937, as amended, and the Agricultural Act of 1961.

FUNDS FOR STRENGTHENING MARKETS, INCOME, AND SUPPLY (SECTION 32) -- CURRENT LAW

Permanent Appropriation, 1990		$4,799,509,749
Less transfers to:		
Department of Commerce to promote and develop fishery products and research pertaining to American fisheries		-61,935,317
Food and Nutrition Service, Child Nutrition Programs		-4,156,554,000
Total transfers		-4,218,489,317
Adjusted Base for 1990		581,020,432
Budget Estimate, 1991:		
Annual permanent appropriation	$5,068,142,328	
Less transfers to:		
Department of Commerce	-61,900,000	
Food and Nutrition Service	-4,632,259,000	
Total transfers	-4,694,159,000	
Budget Estimate, 1991		373,983,328
Decrease from adjusted 1990		-207,037,104

SUMMARY OF INCREASES AND DECREASES - CURRENT LAW
(On basis of adjusted appropriation)

Item of Change	1990 Estimated	Pay Cost	Program Changes	1991 Estimated
Commodity Purchases	$366,300,000	--	-$15,400,000	$350,900,000
Disaster Relief	14,150,000	--	-14,150,000	--
Sunflower and Cottonseed Oil Purchases	30,000,000	--	-30,000,000	--
Commodity Purchase Services	4,279,000	+$72,000	+1,320,000	5,671,000
Marketing Agreements and Orders	7,895,000	+184,000	+447,000	8,526,000
Total Available	422,624,000	+256,000	-57,783,000	365,097,000

PROJECT STATEMENT - CURRENT LAW
(On basis of adjusted appropriation)

Project	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff Years	Amount	Staff Years		Amount	Staff Years
1. Commodity Purchases:							
a. Child Nutrition Program Purchases	$342,070,658	--	$350,900,000	--	--	$350,900,000	--
b. Emergency Surplus Removal	7,358,550	--	15,400,000	--	-$15,400,000(1)	--	--
Subtotal	349,429,208	--	366,300,000	--	-15,400,000	350,900,000	--
2. Diversion Payments	9,492,402	--	--	--	--	--	--
3. Disaster Relief	--	--	14,150,000	--	-14,150,000(2)	--	--
4. Sunflower & Cottonseed Oil Purchases	20,000,000	--	30,000,000	--	-30,000,000(3)	--	--
5. Administrative Funds							
a. Commodity Purchase Services	3,516,356	25	4,279,000	38	+1,392,000	5,671,000	38
b. Marketing Agreements & Orders	7,585,245	117	7,895,000	121	+631,000	8,526,000	127
Subtotal	11,101,601	142	12,174,000	159	+2,023,000(4)	14,197,000	165
Total obligations	390,023,211	142	422,624,000	159	-57,527,000	365,097,000	165
Unobligated balance available, start of year	-116,867,619	--	-132,717,240	--	-158,396,432	-291,113,672	--
Unobligated balance available end of year	132,717,240	--	291,113,672	--	+8,886,328	300,000,000	--
Total Available or Estimate	405,872,832	142	581,020,432	159	-207,037,104	373,983,328	165

OBLIGATION LEVELS
(On basis of available funds)

Item	1989 Actual	1990 Estimated	1991 Estimated
Appropriation or estimate	$4,552,833,158	$4,799,509,749	$5,068,142,328
Unobligated balance available, start of year	116,867,619	132,717,240	291,113,672
Total available	4,669,700,777	4,932,226,989	5,359,256,000
Less transfers to:			
Food and Nutrition Service, Child Nutrition Programs	-4,093,272,000	-4,156,554,000	-4,632,259,000
Department of Commerce	-53,688,326	-61,935,317	-61,900,000
Total transfers	-4,146,960,326	-4,218,489,317	-4,694,159,000
Total available after transfers	522,740,451	713,737,672	665,097,000
Less total obligations	-390,023,211	-422,624,000	-365,097,000 a/
Unobligated balance available, end of year	132,717,240	291,113,672	300,000,000

a/ Under proposed legislation, total obligations in 1991 will be decreased to $356,828,000.

EXPLANATION OF PROGRAM

Under Section 32 of the Act of August 24, 1935, (7 U.S.C. 612c) an amount equal to 30 percent of customs receipts collected during each preceding calendar year and unused balances up to $300 million are available for encouraging the domestic consumption and exportation of agricultural commodities. An amount equal up to 30 percent of receipts collected on fishery products is transferred to the Department of Commerce. Additionally funds are transferred to the Food and Nutrition Service for use by the Child Nutrition Programs as provided in the current Appropriation Act.

Commodity Purchases:

Pursuant to Section 32, the Agricultural Marketing Service (AMS) directs the purchase of commodities such as meats and fish, fruits and vegetables, and poultry in order to stabilize market conditions and provide commodities for distribution through the Food and Nutrition Service to schools as part of the entitlement for the National School Lunch Program. In addition, AMS puchases commodities for other domestic feeding programs of the Food and Nutrition Service (FNS). AMS is reimbursed by FNS for the administrative costs associated with purchases made for FNS domestic feeding programs. Commodities purchased for market stability purposes are donated to eligible schools for public or private institutions that operate meal programs.

Commodity Purchase Services Workload Data:

	1989 Actual	1990 Estimated	1991 Estimated
Contract bids received:			
Fruits and Vegetables	742	775	820
Meat and Fish	877	775	750
Poultry	522	575	600
Total	2,141	2,125	2,170
Contracts awarded:			
Fruits and Vegetables	401	430	450
Meat and Fish	580	520	500
Poultry	332	400	420
Total	1,313	1,350	1,370

Summary of Purchases by Commodity Group
(In thousands)

Commodity Group	1988 Actual		1989 Actual	
	Pounds	Obligations	Pounds	Obligations
Poultry..........	98.587	$69.105	79.507	$59.782
Meat	188.966	213.170	167.734	194.381
Fruit	257.939	100.824	168.774	75.169
Vegetables	222.010	64.896	58.826	20.097
Total	767,502	$447.995	474,841	$349.429

Section 32 Commodity Purchases
1988 and 1989
(In thousands)

Item	1988 Actual		1989 Actual	
	Pounds	Obligations	Pounds	Obligations
Apple Juice, Canned	37.111	$9.422	--	--
Apple Slices, Canned	12.372	5.133	--	--
Apples, Fresh	7.741	1.387	8.135	$1.867
Applesauce	52.378	12.898	26.116	7.605
Apricots, Canned	--	--	10.146	5.301
Beans, Dry	12.006	2.449	17.055	5.164
Beans, Green, Canned	--	--	15.172	5.672
Beans, Green, Frozen	--	--	1.743	961
Beans, Refried, Canned.......	5.220	1.402	4.066	1.337
Beans, Vegetarian	14.475	2.680	11.060	2.535
Beef, Boneless, Frozen	1.260	1.427	252	298
Beef, Bulk, Frozen, Ground ..	103.974	119.412	86.083	103.058
Beef, Canned	288	403	688	1.059
Beef Patties	26.635	27.835	15.582	17.143
Blackberries, Frozen	624	419	1.865	1.185
Cherries, Red, Frozen	18.364	6.801	13.452	6.388
Chicken, Breaded	--	--	468	518
Chicken, Bulk, Chilled	1.938	1.106	--	--
Chicken, Frozen, Cut-Up	35.539	20.763	41.598	26.961
Chicken, Patties	2.242	2.880	--	--
Chicken, Whole, Frozen	--	--	4.869	2.865
Corn, Canned	14.059	3.793	--	--
Corn, Frozen	3.468	1.496	--	--
Date Pieces	6.105	4.800	3.300	2.258
Egg Mix	3.944	4.998	--	--
Eggs, Whole, Frozen	21.607	9.991	--	--
Figs, Dried	2.001	2.031	2.001	1.773
Ham, Cooked, Frozen	4.619	6.939	14.494	19.846
Luncheon Meat	756	1.026	324	428
Mixed Fruit, Canned	12.530	5.913	9.324	4.689
Mixed Vegetables, Frozen	13.704	4.546	--	--
Peaches, Canned	14.915	6.836	518	246
Peaches, Frozen, Diced	--	--	1.218	597
Peaches, Frozen, Sliced	--	--	9.496	4.614
Peaches, Frozen	573	324	6.669	3.889
Pears, Canned	38.936	15.187	3.969	1.684
Pears, Canned, Halves	--	--	13.463	5.700
Pears, Canned, Diced	--	--	7.903	3.301
Pears, Canned, Sliced	--	--	8.418	3.595
Pears, Fresh	7.760	2.193	11.155	2.684
Peas, Canned	--	--	9.730	4.428
Pineapple, Canned	18.163	7.247	--	--
Pineapple, Canned, Chunks ...	--	--	6.898	2.578
Pineapple, Canned, Crushed ..	--	--	424	181
Pineapple, Canned, Tidbits ..	--	--	16.486	6.163
Plums, Canned	3.699	990	--	--
Pollock Nuggets, Frozen	10.433	12.719	13.672	15.751
Pork, Boneless, Frozen	--	--	42	40
Pork, Frozen, Ground	33.816	33.524	31.335	29.586
Potato Rounds, Frozen	51.860	15.872	--	--
Potatoes, French Fries	74.887	20.928	--	--

Item	1988 Actual		1989 Actual	
	Pounds	Obligations	Pounds	Obligations
Potatoes, Sweet, Mashed	832	183	--	--
Potatoes, Sweet, Syrup Pack .	6,854	1,945	--	--
Prunes, Dried	12,954	7,803	3,827	2,713
Raisins	7,449	4,870	--	--
Tomatoes, Canned	7,494	2,790	--	--
Tomatoes Crushed, Canned	12,591	4,511	--	--
Tomato Paste	4,521	2,315	--	--
Tuna, Canned	7,185	9,884	5,262	7,172
Turkey, Chilled	3,744	1,747	8,654	5,491
Turkey, Frozen, Ground	--	--	3,825	2,635
Turkey, Roast	19,026	21,056	10,163	14,476
Turkey, Whole, Frozen........	10,547	6,564	9,940	6,846
Walnuts, English	4,273	6,570	3,991	6,158
Miscellaneous	(60)	(13)	--	--
Total	767,502	$447,995	474,841	$349,429

Federal Food Specifications:

AMS also develops, coordinates, and approves Federal food product descriptions and establishes quality assurance policies and procedures for the procurement of food by USDA, the Department of Defence, Indian Health Service, National Institutes of Health, Bureau of Prisons, and the Veteran Administration. The major goal of this program is to update and streamline Federal food specifications to improve the cost efficiency of Federal food purchasing by using Commercial Item Descriptions wherever possible.

Federal Food Specification Workload Data:

	1989 Actual	1990 Estimated	1990 Estimated
Commercial Item Descriptions (CID's) developed, coordinated and approved	10	21	21
CID's revised	2	2	2
Federal Specifications approved	1	2	2
Documents cancelled	19	11	6
Department of Defense food documents coordinated	71	90	90
Food product description reviewed	61	51	51
Federal specifications amended	1	1	1

Marketing Agreements and Orders:

The marketing agreements and orders program is authorized by the Agricultural Marketing Agreement Act of 1937. Section 32 funds authorized under 7 U.S.C. 1392b are used by the Department for administering marketing agreements and orders programs at the national level and for public hearings and referenda to determine producer sentiment concerning new programs and proposed revisions of marketing orders already in effect. Administration at the local level is financed through handler assessments.

Marketing orders are designed to stabilize market conditions and to improve the returns for fluid milk and fruit and vegetable producers. Stabilized market conditions are accomplished by: (1) establishing minimum prices which handlers pay to dairy producers; and (2) regulating the quality and quantity of fruits and vegetables sold in commercial channels.

The orders are requested by producers and handlers. Evaluations and hearings on proposed marketing orders are conducted by AMS. Proposed orders are subject to approval by producers of the regulated commodity. Once approved, the Secretary issues the marketing order and sets the effective date of the order.

Marketing Agreements and Orders Workload Data:

	Fluid Milk Orders			Fruit, Vegetable and Specialty Crop Orders		
	1989 Actual	1990 Est.	1991 Est.	1989 Actual	1990 Est.	1991 Est.
Agreements and orders programs in effect..........	41	42	38	46	47	48
Requests received for new programs................	--	--	--	--	3	3
Hearings and Petitions:						
Hearings held to consider amendments to existing orders or the issuance of orders in new areas	4	6	6	1	4	3
Amendments issued	12	9	8	1	3	3
Suspensions issued	17	15	15	--	--	--
Petitions received for review of orders	9	10	10	--	--	--
Petitions disposed of during the year	9	10	10	3	3	3
Administrator's decisions issued	5	5	5	3	4	3
Secretary's decisions issued	4	5	5	3	4	3
Secretary's referendum orders issued	2	2	2	1	1	1
Termination orders issued	6	5	5	--	--	--
Order Operation and Enforcement:						
Regulatory orders issued	N/A	N/A	N/A	107	110	120
Investigation of alleged violations	60	65	60	80	120	120
Cases referred to the Department of Justice for prosecution	5	15	10	10	20	20
Court cases resolved	4	10	15	21	35	40
15A Petitions received for review	2	10	10	4	6	6
15A Petitions disposed of during the year	4	10	10	2	6	6
Freedom of Information requests .	13	15	15	37	45	45
Order Management:						
Appointment of an administrative committee	N/A	N/A	N/A	34	37	40
Promulgation of informal rulemaking	N/A	N/A	N/A	25	30	35
Budgets approved	16	16	16	43	45	46

SECTION 32
JUSTIFICATION OF INCREASES AND DECREASES

(1) A decrease of $15,400,000 for emergency surplus removal purchases. The budget customarily does not anticipate this need in the budget year.

(2) A decrease of $14,150,000 for disaster relief purchases. The budget customarily does not anticipate this need in the budget year.

(3) A decrease of $30,000,000 for the purchase of sunflower and cottonseed oil. This purchase was authorized for 1990 in the Rural-Development, Agriculture, and Related Agencies Appropriations Act. (P.L. 101-161). Sunflower and cottonseed oil purchases are not proposed in 1991.

(4) An increase of $2,023,000 for administrative expenses ($12,174,000 available in 1990) consisting of:

(a) an increase of $72,000 which represents 50 percent of the 1991 pay raise for the commodity purchase services program. The remaining 50 percent of the 1991 pay raise is being absorbed.

(b) an increase of $88,000 to offset increased operating costs for the commodity purchase services program.

An increase is needed to continue stabilizing market conditions through the purchase of commodities. Resources will be increased to provide the funding necessary to continue current program levels.

(c) an increase of $184,000 which represents 50 percent of the 1991 pay raise for the marketing agreements and orders program. The remaining 50 percent of the 1991 pay raise is being absorbed.

(d) an increase of $95,000 to offset increased operating costs for the Marketing Agreements and Orders program.

An increase is needed to provide effective oversight of Marketing Agreements and Orders activities. Resources will be increased to provide the funding necessary to continue current program levels.

(e) an increase of $1,232,000 for the Processed Commodities Inventory Management System (PCIMS).

Need for Change. The data systems that have been used by the Agricultural Marketing Service, the Food and Nutrition Service and the Agricultural Stabilization and Conservation Service to purchase, store, and deliver commodities were developed to meet individual agency requirements. As a result, data cannot be readily exchanged between agencies. In order to maximize the removal of surplus commodities from the market and supply food for the National School Lunch program, a compatible data system is being developed. The system will result in the ability to purchase commodities more efficiently by reducing the commodity purchase processing time.

Nature of Change. An integrated purchasing system is being developed. Funding is needed to pay for computer operating costs and contractor support for this system.

(f) an increase of $352,000 to improve the administration of Marketing Agreements and Orders programs.

Need for Change. Additional funding is needed to provide more frequent reviews of marketing order operations, and to provide enhanced analysis of rulemaking and industry/committee proposals. Also, additional funding is needed to carry out the provisions of the Agricultural Agreement Act of 1937 which permits civil penalties on handlers who violate a marketing order provision. Over the last several years, the number of marketing orders and regulations have grown and our resources to adequately review these orders have been severely strained.

Nature of Change. Funding is needed to provide resources necessary to assure that marketing orders comply with authorizing legislation. Six additional marketing specialists will be hired to perform these functions.

Funds for Strengthening Markets, Income, and Supply
(Section 32)

Summary of Proposed Legislation

SUMMARY OF INCREASES AND DECREASES - PROPOSED LEGISLATION

Item of Change	1991 Current Law	Program Changes	President's Request
Commodity Purchases	$350,900,000	--	$350,900,000
Commodity Purchase Services	5,671,000	--	5,671,000
Marketing Agreements and Orders	8,526,000	-$8,526,000	--
Conversion Costs	--	+257,000	257,000
Total Available	365,097,000	-8,269,000	356,828,000

Federal costs of administering marketing agreements and orders, which help stabilize market prices and supply for certain commodities, are presently funded through the Section 32 appropriation. However, costs of administering marketing agreements and orders at the local level are funded through assessments on regulated handlers.

Since the Federal administrative services are done to directly support the local operations, this proposal would recover Federal costs for administration and economic analyses related to Marketing Agreements and Orders for milk, fruit, vegetables, and certain specialty crops through assessments. The appropriate market administrator or committee will be billed for these costs. Payments received would be credited to the account incurring the Federal administrative cost.

The proposal is estimated to generate savings of $8,526,000 in 1991. These savings will be offset by one time start up costs of $257,000 to fund leave liability under the current program that would become an immediate liability under a user fee program, for a net savings of $8,269,000.

Agricultural Marketing Service
Section 32 Administrative Funds
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 AND ESTIMATED 1990 AND 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
California	$378,231	9	$393,000	9	$464,000	10
District of Columbia	10,277,770	122	11,317,000	139	13,191,000	143
Florida	135,790	3	141,000	3	152,000	3
Illinois	71,949	2	75,000	2	81,000	2
Oregon	201,656	5	210,000	5	227,000	5
Texas...............	36,205	1	38,000	1	82,000	2
Total, Available or Estimate..........	11,101,601	142	12,174,000	159	14,197,000	165

Diversion Payments
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 AND ESTIMATED 1990 AND 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Connecticut	$15,284	--	--	--	--	--
New York	41,100	--	--	--	--	--
Pennsylvania	297,400	--	--	--	--	--
Utah	12,750	--	--	--	--	--
Maine	3,960	--	--	--	--	--
Washington	9,121,908	--	--	--	--	--
Total, Available or Estimate	9,492,402	--	--	--	--	--

Sunflower Oil Purchase
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 AND ESTIMATED 1990 AND 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Undistributed	$20,000,000 1/	--	$30,000,000 1/	--	--	--
Total, Available or Estimate	20,000,000 1/	--	30,000,000 1/	--	--	--

1/ Distribution by State cannot be determined.

Agricultural Marketing Service
Commodity Purchases
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 AND ESTIMATED 1990 AND 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Alabama...........	$1,451,613					
Arkansas..........	5,368,976					
California........	43,030,837					
Colorado..........	5,028,765					
Florida...........	293					
Georgia...........	8,004,057					
Hawaii............	2,469,933					
Idaho.............	1,281,577					
Illinois..........	31,286,591					
Indiana...........	316,335					
Iowa..............	6,158,512					
Kansas............	327,883					
Louisiana.........	69,376					
Maine.............	278,904					
Maryland..........	527,533					
Massachusetts.....	9,328,306					
Michigan..........	9,436,689					
Minnesota.........	26,649,156					
Mississippi.......	6,124,530					
Missouri..........	20,611,162					
Nebraska..........	55,700,550					
New Jersey	1,354,478					
New York..........	2,624,528					
North Carolina....	10,212,827					
North Dakota	305,586					
Ohio..............	267,247					
Oklahoma..........	5,505,530					
Oregon............	4,682,226					
Pennsylvania......	27,487,496					
Puerto Rico	1,500,512					
South Dakota	220					
Tennessee.........	405,837					
Texas.............	21,642,712					
Utah..............	1,047,253					
Virginia..........	968,971					
Washington........	21,395,030					
West Virginia	231,343					
Wisconsin.........	16,345,834					
Undistributed.....	--	--	$366,300,000 1/	--	$350,900,000 1/	--
Total, Available or Estimate........	349,429,208	--	366,300,000 1/	--	350,900,000 1/	--

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1/ Since contracts for commodity purchases are awarded to the lowest bidder, distribution by State cannot be determined at this time.

SECTION 32

STATUS OF PROGRAM

Current Activities:

AMS directs the purchase of particular commodities in order to help stabilize market conditions. The commodities acquired are furnished to the Food and Nutrition Service (FNS) to meet the needs of the National School Lunch Program and other domestic feeding programs. Many purchases are coordinated with FNS to assure that the quantity, quality, and variety of commodities purchased can be used in domestic feeding programs. The Agricultural Stabilization and Conservation Service (ASCS) administers the payments to vendors to whom contracts have been awarded, ensures the proper storage of commodities purchased, and assists in their distribution.

The administrative costs for food buying operations and coordination with FNS and ASCS are paid from the Commodity Purchase Services activity in the Section 32 program.

Section 32 funds are also used for the administration of marketing agreements and orders which are used to establish orderly marketing conditions for certain commodities.

AMS also maintains a government-wide food specification program to reduce government food purchase costs by standardizing contract specifications.

Selected Examples of Recent Progress:

1. Commodity Purchases:

   In FY 1989, AMS used Section 32 funds to purchase over $349 million worth of commodities. This amounted to almost 475 million pounds of surplus commodities which were distributed through the nutrition programs of FNS. Of this amount, almost 461 million pounds of the commodities purchased were used to fulfill the National School Lunch Program's commodity subsidy of 12.25 cents per meal for the school year ending June 30, 1989. The remaining 14 million pounds of commodities were purchased for the purpose of emergency surplus removal, and were donated to schools and other institutions.

   AMS also purchased over $238 million (representing 367 million pounds) of commodities from funds appropriated to the Child Nutrition Programs account of FNS.

   During FY 1989, $15.8 million of Section 32 funds were used to purchase frozen Alaska pollock nuggets and $7.2 million were used to purchase canned tuna.

   Commodities purchased in FY 1989 that were not purchased in the previous year included apricots, green beans, breaded chicken, whole frozen chickens, boneless pork and ground turkey.

   In FY 1989, $20 million of Section 32 funds were used to purchase sunflower and cottonseed oil. This purchase was used to facilitate additional sales of sunflower and cottonseed oil in world markets at competitive prices. Funds for this program were authorized by the 1989 Appropriations Act.

2. Diversion Payments:

   In FY 1989, $9.5 million of Section 32 funds were used for diversion of 57.8 million pounds of fresh apples. Over 13 million pounds of apples were donated mainly to food banks for distribution to private charitable feeding programs. The remaining 44.7 million pounds of apples were diverted in bulk bins for use as livestock feed.

3. Food Quality Assurance Program:

During FY 1989, 61 Federal food product description documents were reviewed to determine what changes, if any, should be made in the specifications and what impact these changes would have on certification activities. Also, 11 food product descriptions were approved, including 10 Commercial Item Descriptions (CID's) and one amendment to Federal specifications. Nineteen food product descriptions were canceled.

4. Marketing Agreements and Orders:

a. Dairy:

Milk marketing orders establish orderly marketing conditions for the sale of milk by dairy farmers to handlers. This is done by setting minimum prices which handlers must pay for milk at levels that reflect supply and demand conditions in the markets and assure consumers of an adequate supply of pure and wholesome milk. Nearly 100 billion pounds of milk valued at $13 billion (minimum price basis adjusted for butterfat content) were delivered to plants in 41 market areas in FY 1989. This represented an estimated 79 percent of all Grade A milk marketed by U.S. dairy farmers.

In FY 1989, AMS collected and transferred to ASCS over $8.5 million in dairy producer assessments pursuant to the Omnibus Budget Reconciliation Act of 1987. The 1987 Act amended the Agricultural Act of 1949 to mandate an assessment of 2 1/2 cents per hundredweight in the price received by producers for milk produced in the 48 contiguous States and marketed by producers for commercial use.

AMS is also responsible for verifying by audit the proper payment of the assessments mandated by law.

In April 1989, a rulemaking hearing was conducted on a proposed new milk order for North Carolina and South Carolina. The Department is currently writing its recommended decision on the proposed order.

b. Fruits and Vegetables:

Proposed New Orders

A hearing on a proposed marketing order for seedless European cucumbers was conducted in July 1988 in Sacramento, California. The American Greenhouse Vegetable Grower's Association proposed a marketing order that would regulate the quality, grade, and size of container and pack sizes of seedless European cucumbers grown in greenhouses. The proposed order also includes a provision for research and market development. A recommended decision was issued in September 1989, with comments due by November 10, 1989.

The Texas-New Mexico Potato marketing order became effective in June 1989. It authorizes minimum standards of quality and maturity by grades and sizes for potatoes produced in the "High Plains" area. It also provides marketing research and development. The order is designed to regulate the quality of potatoes shipped and to improve marketing conditions. It was approved by 71 percent of the growers voting in the May 1989 referendum. Based on requests from more than 10 percent of the affected growers, a continuance referendum is planned for November 1989 to determine whether grower support is sufficient to continue the program and implement it in 1990.

An interim Federal marketing order of Vidalia onions grown in Georgia became effective in March 1989. The order authorizes research and market promotion. The second referendum to establish the order was approved by 100 percent of the growers voting.

Amended Orders

A Recommended Decision on amending the Marketing Agreement and Order for raisins produced from California grapes was issued in July 1988. Three exceptions were received and reviewed. The Secretary's Decision and Referendum Order was published on March 24, 1989. A grower referendum was conducted from April 24 through May 3, 1989. More than two-thirds of those voting in the referendum, representing more than two-thirds of the volume of raisins produced by those voting, favored five of the eight amendments. The five amendments that passed include: (1) Adding a production cap under the Raisin Diversion Program; (2) authorizing payments of expenses for alternate Raisin Administrative Committee (RAC) members; (3) establishing mail balloting procedures for nominating independent producer members to the RAC; (4) modifying reserve pool procedures; and (5) authorizing interest and late payment charges when handlers fail to pay for reserve pool raisins. The order amending the order was published on August 18, 1989. The marketing agreement was signed by more than 50 percent of the handlers for approval.

A September 1989 referendum carried to amend the Georgia peach marketing order. Amendments include positive lot inspections, container and marking requirements, and several administrative changes including continuance referenda. The Department is currently reviewing the final order.

A June 26-July 10, 1989 referendum carried to amend the Florida citrus marketing order. The amendment: (1) classifies Canada and Mexico as export markets; (2) defines the Indian River and Interior Districts; (3) permits the committee to borrow money; (4) requires a continuance referendum every six years; and (5) authorizes changes in the qualifications required of a grower member to serve on the committee. The final order amending the marketing order became effective September 8, 1989.

The Department held a public hearing in Palisade, Colorado on November 16, 1988, to consider several amendments to the Colorado peach marketing order. The Colorado Peach Administrative Committee testified in favor of several proposed amendments. The proposed amendments would: (1) authorize regulation of peaches within Colorado; (2) reapportion the committee membership; (3) set limits on tenure of committee members; (4) authorize changes in committee compensation and voting procedure; (5) authorize penalty charges on overdue assessments; (6) authorize production research projects; (7) add provisions for verification of reports and records and for maintaining confidentiality of handler records; (8) add authority to change the volume of peaches not subject to regulation; and (9) require periodic referenda every six years. The Department is currently preparing a recommended decision based on the hearing record.

A request for a hearing to amend the California Kiwi Fruit marketing order was received in August 1989. A notice is being prepared with a hearing tentatively scheduled for December 1989.

TUESDAY, MARCH 20, 1990.

FEDERAL GRAIN INSPECTION SERVICE

WITNESSES

JO ANN SMITH, ASSISTANT SECRETARY FOR MARKETING AND INSPECTION SERVICES

DAVID R. GALLIART, ACTING ADMINISTRATOR, FEDERAL GRAIN INSPECTION SERVICE

ROBERT "E" SODERSTROM, DIRECTOR, RESOURCES MANAGEMENT DIVISION

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Mr. WHITTEN. Mr. Akaka, take the Chair, please. I am going before the Rules Committee.

Mr. AKAKA [assuming chair]. Will the Federal Grain Inspection Service panel please come forward?

It is good to have you here, Madam Secretary and Administrators. We are happy to have you here. Will you present your testimony at your will and we will include it in its entirety in the record.

Ms. SMITH. Thank you, Mr. Chairman.

It is a pleasure to be here today to present the budget request for the Federal Grain Inspection Service. The fiscal year 1991 budget request for FGIS includes funding for ongoing programs, new initiatives, and inflation. The program activities will be discussed by Mr. Dave Galliart, the Acting Administrator of the FGIS.

I would just like to say that this Agency looks forward to working with the Hill and industry to achieve grain quality and to deliver it to the customers in the manner in which they have purchased the product across both domestic and international markets.

Thank you.

Mr. AKAKA. Thank you. Mr. Galliart?

BUDGET PROPOSALS

Mr. GALLIART. Mr. Chairman and members of the subcommittee, we appreciate the opportunity to present the Federal Grain Inspection Service budget for fiscal year 1991. I will submit our complete written statement for the record and offer a brief summary of the statement.

The total agency budget request for fiscal year 1991 is $47.6 million; the fiscal year 1990 budget is $45 million. In this request, $10.4 million is for existing appropriated activities, new initiatives, and inflation.

Inspection and weighing activities, funded by user fees, are being requested at $37.2 million to cover increased operating costs and inflation. In fiscal year 1989, revenues from user fees were $35.6 million; obligations were $35.4 million.

Legislation has been submitted for fiscal year 1991 to recover costs of establishing standards and specifications for agricultural products. This would shift $5.7 million into our existing user fee program, leaving $4.7 in appropriated funding.

FISCAL YEAR 1991 INITIATIVES

Program initiatives that I mentioned earlier include food safety, which involves mycotoxin detection, pesticide and chemical residues, and new methods to detect off-odors in grain. Several new aflatoxin test procedures were developed in 1989 and more are being developed in 1990. Work that began in 1989 on pesticide residues will be continued in 1990 and increased in 1991.

Grain grading methodology to establish and improve procedures include wheat classification; developing calibrations for protein, starch, and oil in corn; and completing the final phase of a multiyear project to automate the FGIS Kansas City Technical Center. This project provides the basis for the FGIS Technical Center to better ensure the integrity, quality, and effectiveness of the national grain inspection system.

Improving equipment specifications and tolerances involves single kernel moisture content, laboratory scale automation, and automating the grain inspection system.

Development of rapeseed or canola standards, and possible amendments to the rice and barley standards are scheduled for revisions in fiscal year 1991.

Implementing results from a study on the economic impact of prohibiting or adding recirculated dust to grain at export elevators will be pursued.

FY 1989 ACCOMPLISHMENTS

Also, for your information, Mr. Chairman, during fiscal year 1989, FGIS activity included evaluating commercial test kits for aflatoxin in corn and for pesticide residues in grain; implementing soybean, protein, and oil testing services at the field office level; completing a study on combining dockage and foreign material in wheat as a grading factor, of which results were provided to the House and Senate this past year; and conducting economic impact studies on the potential impact of changing standards for wheat and sorghum.

The FGIS Advisory Committee continues to provide advice to the Administrator on grain quality issues.

For the first time under the U.S. Grain Standards Act, civil penalties totalling $20,000 were assessed against two firms for deceptive loading practices.

Mr. Chairman, this concludes my summary statement. I would be glad to answers questions from you and other members of the committee.

[CLERK'S NOTE: Written testimony appears on pages 630 through 638. The Federal Grain Inspection Service explanatory notes appear on pages 639 through 658.]

Mr. AKAKA. Thank you very much, Mr. Galliart.

Over the years, Mr. Galliart, buyers of grain have become more sophisticated in their requirements and so they are beginning to talk about requirements including percentage of protein, fat, and other aspects. What is FGIS doing to move into new technologies to respond to these market inquiries?

APPLICATION OF NEW TECHNOLOGY

Mr. GALLIART. You are correct in the request from our buyers, they are asking for more information, particularly with regard to end use. This past year we introduced testing of oil and protein in soybeans, which has gone over well and is actually well accepted by the importers. We are also testing for oil in sunflower seeds. We test for protein, have done so for some time, and will continue to do so.

For your information, some months ago a survey was conducted with the ARS and the FGIS personnel looking toward the needs of the importer. As a result of the survey many of the needs or tests have been adopted and are in place, others are in the process of being developed.

Mr. AKAKA. Thank you. Let me call on Mrs. Smith for questions.

AFLATOXIN TESTING

Mrs. SMITH. Thank you very much. Welcome Mr. Galliart. We are glad you are here.

I notice you mention briefly the activities in regard to testing for aflatoxin. Would you briefly explain to us how often aflatoxin contamination is found in corn. Does it threaten our position as a worldwide exporter of corn?

Mr. GALLIART. In the 1988 corn crop, because of the drought situation and the resulting stress, there was a problem as far as aflatoxin in corn was concerned. This year, 1989, there is no evidence of that kind of problem. Basically, we test at the export points. Ninety percent of the corn that leaves this country is tested at the request of the applicant, the other 10 percent we monitor. Personally, I don't feel that the aflatoxin problem is a threat to the corn industry.

FOOD SAFETY

Mrs. SMITH. Now, I notice that you are asking $10.4 million for fiscal year 1991 compared to $8.2 million for fiscal year 1990, a nearly $2.2 million increase in your budget. You say that this is needed to carry out current programs and for new initiatives. How much of this will be used for food safety, and what activities will FGIS be involved in in food safety?

Mr. GALLIART. About $105,000 will be used for two initiatives. Basically, a continuation of our work in aflatoxin testing and further evaluation of mycotoxin testing in general; and monitoring pesticide residues, which will start hopefully on a small scale this year.

Mrs. SMITH. Thank you very much. No more questions, Mr. Chairman.

Mr. AKAKA. Thank you, Mrs. Smith.

Mr. Smith?

FOREIGN COMPLAINTS

Mr. SMITH. How are the complaints running compared to last year and the year before on grain?

Mr. GALLIART. We have less complaints this year. Actually, in fiscal year 1988 we had 35 complaints.

Mr. SMITH. Thirty what?

Mr. GALLIART. Thirty five. In fiscal year 1989, twenty-five complaints; and to date, ten.

Mr. SMITH. What is the nature of the ones you have received to date?

Mr. GALLIART. Foreign material in soybeans, broken corn, and foreign material in corn. Also some complaints about infestation.

Mr. SMITH. Is this on large shipments?

Mr. GALLIART. Shiplots.

Mr. SMITH. What have you found in the last year? Have the complaints been justified or not?

Mr. GALLIART. Well, we have found that—let me give you a brief explanation of how we determine whether there is a legitimate complaint. When we receive a complaint we examine our file samples. We also ask for samples from the importer or the receiver. We grade the samples. In most cases we find that the grade that we issued in the first place is correct.

Mr. SMITH. Well, the complaint might not have been that the grade was wrong though, right?

Mr. GALLIART. In most cases, yes.

Mr. SMITH. That's what the complaint is about?

Mr. GALLIART. If they are complaining about infestation, for instance, that is part of the grade and we examine the file samples to determine whether or not there is infestation in the file samples.

Mr. SMITH. Well, don't some of the complaints relate to the fact that, whether the grade is right or wrong, they did not expect the kind of foreign material they found in the grade?

Mr. GALLIART. That's true. They did not expect what they found.

Mr. SMITH. Have you found that the complaint was justified in some cases? This doesn't mean that the grade was different than what you had said, but was their complaint justified?

Mr. GALLIART. During the survey I talked about earlier, the major complaint made was the lack of uniformity between shipments. The receiver receives one shiplot and processes that shiplot and finds the end product to be of a certain quality, a certain value. The next shiplot may not yield the same kind of end product. The reason for that, we believe, is explainable. In the first lot, he may receive a number 2 grade, that grade is basically on foreign material. The next lot he may receive a number 2 grade, that grade is basically on damage. That may result in some difference in the end product.

Mr. SMITH. Does this mean we need more standards?

Mr. GALLIART. I don't know that we necessarily need more standards. I think we need to provide more information, particularly with regard to end use.

Mr. SMITH. How are you coming on that?

Mr. GALLIART. I think we are doing a pretty good job in that area. As I mentioned earlier, in soybeans, we are testing for oil and protein. That was implemented about six months ago. That is working well.

Mr. SMITH. What about dividing up the foreign material into different kinds of foreign material?

Mr. GALLIART. We are about ready to propose that sort of change in sorghum, to split the broken kernels and the foreign material into two separate factors as opposed to the one factor that it is now.

Also, we have a study going for us, two universities are involved in the study, to look at the single factor of broken corn and foreign material in corn. The study hopefully will finish sometime the first of next year, and we will then determine any need for a change in the standard.

There has been, for your edification and I suspect you know this, a lot of interest in those two particular factors.

Mr. SMITH. If we did that, would that reduce the foreign complaints?

Mr. GALLIART. I am not sure it would reduce the complaints. It would give the buyer more information. Broken corn has one value, foreign material has another. That is true in sorghum also.

Mr. SMITH. Well, when they see it come off the ship, if there are rice hulls in corn, they look at that a little differently than if it were broken corn in corn.

Mr. GALLIART. There shouldn't be rice hulls in corn, sir.

Mr. SMITH. Well, there have been at some times in the past.

Mr. GALLIART. Under the Grain Quality Improvement Act, anyone is precluded from adding——

Mr. SMITH. I happen to know something about that. But it says in this article in the Journal of Commerce, "A top soviet grain official said U.S. grain shipments contain much more foreign matter, insects, and dockage than exports from other countries." And he warned that could mean a cut in future U.S. business if changes are not made. So it gets down to be a matter of not just whether or not the standards are met, barely met, and if they are accurate, it gets to be how clean the grain is as compared to what they can get from some other country. What can we do about this, other than what we have done? I hope we have made some progress in not permitting them to add foreign material back into the grain once its removed.

Mr. GALLIART. One of the Soviets' major complaints—well, two really. One, has been infestation. We have worked with them for a number of years and pretty much have improved that situation, improved it considerably I must say. The way we fumigate, the information that we have provided the Soviets on how to fumigate and what to expect has been thorough. Although they still have some fear of fumigation, it is a much better situation than it has been for years.

The second problem they have is weed seeds. If I understand correctly, they do receive a basic contract discount on the amount of weed seeds in the lot. We hope that one day there will be sufficient incentive to remove the weed seeds.

Mr. **Smith**. Well, our whole marketing system doesn't really adequately reward those that deliver the cleanest grain.

Mr. **Galliart**. I agree. We certainly need an incentive system as far as our grain marketing is concerned.

Mr. **Smith**. In the last year, have you found any instances of exporters illegally adding material at export points?

Mr. **Galliart**. We have not found any instances. However, there have been a number of inquiries into the rules and the law. There have been several instances where there has been a mistake, such as where soybeans and corn have been mixed together and they reported this to us.

We spend quite a lot of time training our employees and providing information to the grain industry with regard to that statute.

GRAIN DUST

Mr. **Smith**. Are you finding any instances where it appears dust has been added back in after it was taken out?

Mr. **Galliart**. We have found no instances.

Mr. **Smith**. Not in the last year or two?

Mr. **Galliart**. Where they have taken the dust out, taken it to a bin and brought it back out, no, sir.

Mr. **Smith**. That's all I have.

Mr. **Akaka**. Thank you. Mr. Myers?

Mr. **Myers**. Mr. Chairman, I apologize to the witnesses and to my colleagues for getting here late. I will yield to my colleague, the gentleman from New Mexico. He has been here a long time. Again, I apologize for being late.

Mr. **Akaka**. Mr. Skeen?

Mr. **Skeen**. I thank the gentleman for yielding. Thank you, Mr. Chairman.

AFLATOXIN QUICK TESTS

Mr. Galliart, I would like to know something about this quick test that you are proposing to use. How reliable is it; how well trained are those folks that are going to use it; what are the qualifications; and so forth. If you could just give me a general summary of what that program is about I would appreciate it.

Mr. **Galliart**. We have been using the quick test for nearly a year now. We went into the use of the quick test through the development of a protocol, working with the manufacturers who were offering them to us, to determine the accuracy, ease of use—the kinds of things one puts into protocols looking toward a new instrumentation or device. The training, because it is rather a simple test, hasn't been all that difficult. We spend time with our field people in training them and have enjoyed good success not only with the training and the application of the test, but also with the results.

Mr. **Skeen**. How about its reliability?

Mr. **Galliart**. We think it——

Mr. **Skeen**. Is it very high?

Mr. **Galliart**. Very reliable.

Mr. **Skeen**. Good product?

Mr. **Galliart**. We think it is. I might add one more thing, we will look now toward more sophistication in the quick test; we are looking for a quick test that will give us a quantification or an actual aflatoxin result.

Mr. **Skeen**. I see. So that you have some kind of standards comparison. I appreciate that.

You mentioned something that interested me on corn just a moment ago, that you test some 90 percent of the corn and then you monitor 10 percent. What do you mean by monitor? Does that involve any testing?

Mr. **Galliart**. Same thing. To give you a little background, the testing for aflatoxin on shiplot grain is not a mandatory test. It is tested at the request of the applicant. The applicants request tests for shiplot corn 90 percent of the time. We spot check the other 10 percent of shiplots that are not tested on the basis of a request for inspection.

Mr. **Skeen**. That's what I meant, that the other 10 percent is a spot check system that is used and so forth.

Very good. Thank you very much for your response. Thank you, Mr. Chairman.

GRAIN GRADING METHODOLOGY

Mr. **Whitten**. Your fiscal year 1991 budget request includes an increase of $853,000 for seven initiatives targeted at increasing grain grading precision. Please provide a brief description of these initiatives, as well as costs associated with each.

Mr. **Galliart**. The continued development of a new wheat classification system is a high priority item and one of the seven initiatives which will require additional funds. For the past two years, a significant amount of data has been collected on the U.S. wheat crop using near infrared grain analyzers and single kernel hardness testers. These data are currently being used to develop a new wheat classification system that will identify hardness, this testing does not distinguish between cultivars. Additional funding of $44,000 is needed to purchase prototype single kernel hardness testers for field testing the new classification system. As the new classification system is implemented, additional staff and resources may be required.

An additional $220,000 in funding and an increase of four staff years are needed to research and implement corn oil, protein, and starch testing. Research will continue in the development of both near infrared reflectance and transmittance calibrations. Additional staff and equipment will be acquired and samples will be monitored against reference samples on a weekly basis to ensure proper method standardization.

Another initiative is the contractual agreement with Colorado State University to automate the Kansas City Technical Center. We have requested $64,000 for FY 1991 to complete this multi-year project. The Technical Center is currently processing over 75,000 grain samples each year through its various quality control and research functions. The objective of this project is to increase the sample handling and data analysis efficiency. With the addition of other new programs, such as corn constituent analysis in the near future, the number of samples which are processed by the Technical Center will increase to over 100,000 per year.

Research will be conducted on equipment to objectively measure quality attributes in grain. We have requested $50,000 to fund research on single kernel moisture analysis and for the design of a new dockage tester, to obtain equipment to measure corn breakage, to evaluate screening tests for insect infestation, and to establish standards for uniform and consistent automated inspection.

An additional $100,000 and an increase of 1 staff year is needed for the image analysis initiative. We will evaluate the use of a computerized camera image analysis system for grain grading. Funds will be used to build a prototype system using existing technology. The completed image analysis system would take a picture of the sampled grain and transmit this image to the computer which has been programmed using neutral networking techniques to recognize grain characteristics and standards. The samples would then be graded and inspected automatically and objectively.

Approximately $125,000 will be used to develop and maintain objective equipment specifications and maintenance tolerances. Inspection equipment used to measure grain quality will be standardized and traceable to national standards in conjunction with the National Institute of Standards and Technology. The Agency will continue designing an automated weighing system that would not require 100 percent supervision by official personnel. Electronic entry of weighing data will increase accuracy.

The final, and possibly the most futuristic, initiative is the development of a Model Grain Inspection Laboratory completely based on objective testing. The grain inspection laboratory of the future will look much different from those of today. More emphasis is being placed on grain constituent analysis and end-use quality parameters rather than appearance. The Laboratory will contain the most technologically advanced instrumentation and objective testing methods available. Two additional staff years will be needed and an estimated $250,000. The initiative will require funding for fiscal years 1992 through 1994.

Mr. WHITTEN. How many additional staff and how much equipment will be needed as work on near infrared measurement of protein, starch and oil in corn continues? What will these additional people do?

Mr. GALLIART. An increase of four staff years is needed. We plan to purchase a near infrared transmittance instrument, develop new techniques for chemical references, and develop calibrations based on these references. The additional staff will be needed to provide chemical reference analysis because the instrument values must constantly be verified by chemical analysis on a small percentage of the samples analyzed in the official inspection system. In addition, each new analytical program requires the development of standard samples which must be sent to each location where the service is offered. These samples are used to keep the analysis uniform from location-to-location. The additional staff will also find, process, clean, package, maintain, and ship the reference samples.

Mr. WHITTEN. Please describe in further detail the model lab that you plan to establish at the Kansas City Tech Center. How much will this lab cost? Is this part of the multi-year project to automate the Center.

Mr. GALLIART. Basic research into the measurement of various grain constituents and their effects on end-use quality is at an all time high. One startling statistic in support of this statement is the fact that AGRICOLA, the USDA AGRICultural OnLine Access data file, is increasing at an average rate of 12,000 records per month. This means that approximately 12,000 papers dealing with agricultural products, environmental impact, foods, pesticides, plant science, chemistry, soils, etc., are being published every month.

FGIS must look toward the inspection system needed to meet the demands of U.S. Agriculture in the 21st century. Funds will be used to establish and equip a state-of-the-art laboratory for the inspection of grain which will include automated sample analysis using robotics, image analysis, and other mechanized equipment. Computer control will include the use of neutral network systems. Analyses will be run simultaneously with the samples tested by the Board of Appeals and Review to determine the consistency and repeatability of equipment and inspection results. Only objective testing would be carried out in this laboratory in order to greatly increase the uniformity of inspections in the future.

This laboratory, which will cost $250,000 in fiscal year 1991, will clear the way for the development of a faster, more efficient, and more accurate inspection system based on the latest analytical techniques. The ability of our Agency to offer fast, reliable analyses of U.S. grain will assist our efforts to maintain and increase U.S. grain exports. This project is not part of the current multi-year project to automate the Technical Center.

Mr. WHITTEN. What is the total cost to automate the Center? What is the timeframe for completion?

Mr. GALLIART. The actual automation process is being carried out in five different phases. Phases 1, 2, and 3 dealt with the determination of the information handling needs of the Technical Center along with the design of a system to meet these needs. These three phases have been completed at a cost of $237,000. Phases 4 and 5 deal with the purchase of hardware and software and the installation of the system. The cost estimate for these two phases is $500,000. Thus the total cost of automating the Technical Center is approximately $767,000 of which $237,000 has already been spent. Also, space must be renovated to house a minicomputer which was recommended after an extensive systems analysis. The renovation project which includes preparation of the space for the minicomputer is currently out for bid. A rough estimate of renovation costs for the computer system is approximately $30,000. The projected completion date for this project is May 1991.

Mr. WHITTEN. Also describe in further detail the computerized/ TV camera/type image analysis system for grain grading. Include the total cost and any cost saving benefits. Where will the main computer be located? If an image needs to be transmitted to this computer before samples could be graded and inspected, how much time would this add or save?

Mr. GALLIART. Several different groups including the University of Illinois and the Grain Marketing Research Lab are doing the basic research needed to develop an image analysis system for use in grading grain. In such a system, the computer referred to is a small personal computer of the type which is commonly attached to any modern analytical instrument. In other words, what is being described is a bench-top unit containing a small computer for processing the image data which is collected by a camera system. The signal transmission would occur between the camera and the attached computer. Neutral network software systems are capable of learning how to analyze this image data when shown several specific examples of the type of damage one wishes to detect. For example, the system could be shown several moldy soybeans and train the computer system to identify mold damage. It is difficult to determine the total cost of such an analyzer since they are not commercially available. We have requested $100,000 and an addition of 1 staff year to provide the resources to purchase the components and software needed to build such a system and then to test it against current grading techniques. Because of the infancy of this research, we cannot estimate the cost savings benefits. The major benefit from such a system would be the expected increase in the uniformity and consistency of grain inspection.

PROPOSED LEGISLATION

Mr. WHITTEN. Legislation has been submitted to recover the entire cost of your standardization activities. Do you anticipate this piece of legislation to be passed by Congress in this fiscal year?

Mr. GALLIART. On March 15, 1990, Secretary Yeutter submitted proposed legislation to the Congress to recover the cost of establishing standards and specifications for agricultural products. There is no reason to conclude that it will not be passed by Congress.

Mr. WHITTEN. If your legislative proposal were to pass Congress this year, how long would it take you to write rules and regulations to implement it?

Mr. GALLIART. FGIS can prepare all documents to support a cost recovery program while the legislation is pending; but, the regulatory process cannot begin until the legislation is signed. The regulatory and rulemaking cycle can take from 5 to 9 months.

ECONOMIC IMPACT STUDIES

Mr. WHITTEN. A portion of your requested increase for standardization activities is to be used to conduct economic impact studies on certain commodities as they enter the market chain. Will these studies be performed in-house or will they be contracted out?

Mr. GALLIART. FGIS relies on the Economic Research Service, ERS, to analyze the economic impact of potential standard changes.

Mr. WHITTEN. Likewise, will the economic impact study on methods of cleaning grain be done in-house or contracted out?

Mr. GALLIART. FGIS will work through USDA, ERS to analyze the economic impact of cleaning grain with possible collaboration from universities.

OPERATING COSTS

Mr. **Whitten**. Please provide a separate and complete breakout of the $226,000 increase requested for operating costs in standardization activities and the $188,000 increase requested in compliance activities.

Mr. **Galliart**. The increase in operating costs for fiscal year 1991 is a result of inflationary increases. There was a 5 percent increase in rent, utilities, travel, supplies, and other services. These increases were divided between the standardization and compliance activities.

GRAIN DUST EXPLOSIONS

Mr. **Whitten**. On page 19-9 of your explanatory notes you state that the Department's Safety Subcommittee has recommended further study into methods to prevent or suppress grain dust explosions. What are your plans for fulfilling this recommendation?

Mr. **Galliart**. The most promising methods of grain dust explosion suppression have been developed by the U.S. Bureau of Mines. The Bureau has submitted a research proposal to a private sector organization. The Departments' Safety Subcommittee is waiting on the private sector response. If the private sector organization decides to sponsor the research, the Safety Subcommittee will monitor procedures and results. If the private sector organization chooses not to sponsor the research, the Safety Subcommittee will attempt to assist the Bureau of Mines in locating necessary funds.

Mr. **Whitten**. You state in your explanatory notes that research on prohibiting the recombination of recirculating grain dust at export elevators will be completed in fiscal year 1990. On what evidence do you base your request for $25,000 to implement findings from research which is not yet completed?

Mr. **Galliart**. Regulations implementing the provisions of the Grain Quality Improvement Act of 1986 prohibited binned dust from being recombined or added back into the grain, and stated that further study would be necessary before establishing regulations that would require significant alterations to the dust control systems which simply recirculate dust rather than collecting it in bins.

This study is now being performed by the Texas A&M Research Foundation. The contract began in January 1990 and will continue through the rest of this year. It is not possible to predict the results of the study at this time. However, the small sum of $25,000 has been requested for FY 1991 to implement any necessary followup.

Mr. **Whitten**. Please provide, for the record, the number of explosions, including the number of deaths and injuries, for fiscal years 1982 through 1989.

Mr. **Galliart**. We will provide a chart showing the number of grain dust explosions, including the number of deaths and injuries, for fiscal year 1982 through 1989.

[The information follows:]

GRAIN DUST EXPLOSIONS

[Fiscal years 1982-89]

	Explosions	Deaths	Injuries
Year:			
1982	13	8	36
1983	12	5	12
1984	20	8	29
1985	16	1	14
1986	25	6	22
1987	19	0	17
1988	12	8	12
1989	10	2	05
Total	127	38	147

Mr. WHITTEN. Please describe in further detail the contract that was initiated with Poland on explosion suppression.

Mr. GALLIART. The contract with the University of Technology, Warsaw, Poland, for grain dust explosion research is intended to determine some parameters of the dust explosion phenomenon. An attempt will be made to determine the critical conditions for explosion initiation. Flame propagation velocity in both stable and turbulent air will be measured. Several methods of explosion suppression both passive and active will be evaluated. Delays in obtaining grain dust have been encountered which has affected timely completion of the research.

WHEAT CLASSIFICATION

Mr. WHITTEN. On page 19g-1 of your explanatory notes, you state that you operate and maintain three different prototype single-kernel hardness testers developed separately by two ARS labs and Kansas State University. Wouldn't it be more productive as well as cost-effective to collaborate and share information to produce a single more effective instrument instead of the three?

Mr. GALLIART. The development of a single kernel hardness tester was a completely new enterprise. Each of the three prototypes mentioned used a different method for measuring hardness. One of the ARS prototypes monitored the sound made as a kernel was ground; one measured the force required to crush a kernel, and the third instrument measured the force required to cut a kernel. We had no idea which, if any, of these technologies would be the most useful as a wheat classification tool. Therefore, we believe that it was prudent to study all three.

During this study, several open meetings were held with the three groups involved to share data and to discuss results. We now have sufficient experience with the measurement of single kernel hardness that we can select one of these prototypes for further development. Our Research and Development Branch has developed an experimental protocol which will be used to test two models of each prototype. Selection of a single prototype will be made early in fiscal year 1991.

APPROPRIATION LANGUAGE

Mr. **Whitten**. You have requested appropriation language that would allow you to exceed the dollar limitation by ten percent. Under what circumstance would you expect the need to exceed the current limitation?

Mr. **Galliart**. FGIS may need to exceed the trust fund limitation in fiscal year 1991 if there is an increase in export activity. In fiscal year 1989 the Agency obligated $35,414,000 or 96 percent of the $36,856,000 limitation. Financial history shows that activity has been increasing. For example, obligations in fiscal year 1987 were $29,404,000 or 80 percent of the limitation and those for fiscal year 1988 were $31,348,000 or 85 percent of the limitation.

INSPECTION AND WEIGHING ACTIVITIES

Mr. **Whitten**. Why do you project the quantity of rice exports to decrease in fiscal year 1990 over 1989?

Mr. **Galliart**. The World Agricultural Outlook Board has forecast that U.S. rice exports will decline by about 9 percent, or 2.6 million tons, in 1990. This decline is due to reduced world imports brought about, in part, by increased foreign production.

Mr. **Whitten**. Please provide for the record the number of railroad track scales tests and the number of certified export scales in service for fiscal years 1989, 1990, 1991.

Mr. **Galliart**. I will provide for the record information on railroad scale tests and the number of certified export scales.

[The information follows:]

WEIGHING PROGRAM DATA

[Mar 28, 1990]

Item	Fiscal Year—			
	1987	1988	1989	1990 YTD
Number of RR track scales tested	123	120	110	59
Number of official scales in service at export elevators	455	475	408	380

Mr. **Whitten**. Your budget request includes an increase of $308,000 to cover pay costs, benefits and inflation, but you propose to have six less staff years in fiscal year 1991 than you have in fiscal year 1990 and 22 less than in fiscal year 1989. Please explain.

Mr. **Gilliart**. The Agency receives a staff year ceiling that the Department has distributed between appropriated and trust programs based on prior year activities. Program activities funded by appropriations will increase in fiscal year 1991, thus we requested an increase in this staff year ceiling. Activity in the Inspection and Weighing Programs could increase; if it does it will be on a fluctuating or work load basis.

The pay cost increase of $308,000 covers the 1989 pay raise and 50 percent of the 1991 pay raise. The Agency will absorb the 1990 pay raise and 50 percent of the 1991 increase.

COMPLAINTS AND INQUIRIES

Mr. **Whitten**. I notice you have two open quality complaints from over a year ago, one dated October 5, 1988, and one dated November 14, 1988. Is it customary for complaints to take this long to resolve? What are the circumstances involved?

Mr. **Galliart**. It is unusual for quality complaints to take over a year to resolve, although it is possible. Both of the complaints referenced in the question have now been addressed.

When a complaint is received, file samples held from the original inspection are sent from the loading port to the Board of Appeals and Review in Kansas City for analysis. All loading documentation is sent to the International Monitoring Staff—IMS—in Washington. If the receiver submits a destination sample for our review, it comes through the Agricultural Counselor in the receiving country to the Foreign Agricultural Service in Washington. We send the destination sample to the Board of Appeals and Review. IMS reviews all available information and prepares a report of findings. We offer this explanation to demonstrate that some delays in responding are unavoidable.

Frequently, the initial complaints lack the necessary information to initiate the investigation, and time is lost in sending followup inquiries to the buyer through the Agricultural Counselor. Occasionally, our findings result in referring the case to the Office of the Inspector General for further investigation, which adds to the response time.

While FGIS considers all discrepancy reports to be important, some carry a higher degree of urgency than others. For example, in some complaint cases, receivers have refused to discharge a vessel until the discrepancy is resolved. Such an incident may involve sending a representative to the destination port to address the complaint immediately. In other cases, we have received written complaints from 6 to 12 months after the cargo arrived.

ADVISORY COMMITTEE

Mr. **Whitten**. Have there been changes during the past year to the membership of the FGIS Advisory Committee? If so, please identify the new members.

Mr. **Galliart**. No membership changes have taken place during the past year. Appointments of six new members and five new alternate members are pending.

Mr. **Whitten**. Please provide for the record a schedule of Advisory Committee meetings that took place during the past year.

Mr. **Galliart**. During fiscal year 1989, FGIS Advisory Committee meetings were held November 17, 1988, in Baltimore, Maryland; April 13, 1989, in Alexandria, Virginia; and July 27, 1989, in Vancouver, Washington.

Mr. **Whitten**. What were the recommendations of the Advisory Committee? What is the status of these recommendations?

Mr. **Galliart**. During fiscal year 1989, the Federal Grain Inspection Service Advisory Committee made several specific recommendations. I will provide them for the record.

[The information follows:]

That FGIS develop a mission statement to read: "The mission of FGIS is to facilitate the marketing of grain, oilseeds, pulses, rice, and related commodities by establishing descriptive standards and terms, accurately and consistently certifying quality, providing for uniform and service responsibility, and providing the framework for commodity quality improvement incentives to both domestic and foreign buyers."

That, concerning a bill by Congressman Grady regarding in-transit grain quality:

The Grady proposal not be implemented at this time, but could be reconsidered if the necessary technology is adequately developed.

Research be continued and expedited to develop technology to identify situations which contribute to deterioration of grain while in transit.

The FGIS Advisory Committee reaffirm its earlier position to not blend corn lots with moisture levels with a variance greater than 4 percent.

The grain industry, producer groups, extension groups, and USDA educators to encourage application of existing technology to maintain grain quality from the producer through the domestic and foreign user, and that this effort be coordinated through the grain quality workshops.

That the present level of retained earnings in the FGIS trust fund accounts be accepted as reasonable and that no change be made in the fees as of July 27, 1989.

That a Subcommittee of the Advisory Committee be formed to look at the factors relating to foreign material, broken kernels, and dockage in different grains.

In response to the recommendations, FGIS adopted the mission statement; reported to Congressman Grady regarding in-transit grain quality; has not adjusted user fees; and formed the Dockage, Foreign Material, and Broken Grains Subcommittee.

Mr. WHITTEN. What was the cost of the Advisory Committee's activities during fiscal year 1989.

Mr. GALLIART. Advisory Committee costs for fiscal year 1989 were $25,700.

TRAVEL

Mr. WHITTEN. Why do you anticipate an increase of $133,315 in travel from fiscal year 1989 to fiscal year 1991?

Mr. GALLIART. The increase in travel is to cover the travel that is associated with quality assurance training. We also anticipate a need for funds for travel for new hires, routine relocation expenses, and for the 13 additional staff years we plan to add to the appropriated program.

CIVIL PENALTIES

Mr. WHITTEN. Two grain facilities were assessed $20,000 for deceptive loading practices. Was this money returned to the agency to be used or was it deposited in the Miscellaneous Funds of the General Treasury?

Mr. GALLIART. The money assessed for civil penalties was not returned to the agency. In accordance with the U.S. Grain Standards Act, "Moneys received in payment of such civil penalties shall be deposited in the general funds of the United States Treasury."

Mr. WHITTEN. How is it that the agency has found that civil penalties are an effective administrative tool to effect a more timely action when you have only assessed two penalties?

Mr. GALLIART. It is our experience that the criminal prosecution of violations of the U.S. Grain Standards Act is very time consuming. The primary purpose of the civil penalty program is to prevent or deter persons from committing violations of the Act. The flexibility for settlements under the civil penalty administrtive action results in more timely resoluton of such cases. We view the civil penalty sanction as an effective enforcement tool.

DELEGATED AUTHORITY

Mr. WHITTEN. For the record, please provide a list of the states and the designated state and private agencies that have been delegated authority for weighing and inspection services.

Mr. GALLIART. We will provide this list for the record

[The information follows:]

FEDERAL/STATE AGREEMENTS

California Department of Food and Agriculture.[1]
Washington Department of Agriculture.[1]

DELEGATED STATES (6)

Alabama Department of Agriculture and Industries.[1]
Minnesota Department of Agriculture.[1]
Mississippi Department of Agriculture and Commerce.[1]
South Carolina Department of Agriculture.[1]
Virginia Department of Agriculture and Consumer Services.[1]
Wisconsin Department of Agriculture, Trade and Consumer Protection.[1]

DESIGNATED STATES (12)

Alaska Department of Natural Resources, Division of Agriculture.
Georgia Department of Agriculture.
Kansas State Grain Inspection Department.
Louisiana Department of Agriculture.[1]
Maine Department of Agriculture.
Missouri Department of Agriculture.
Montana Department of Agriculture.[1]
New York State Department of Agriculture and Markets.
North Carolina Department of Agriculture.
Oregon Department of Agriculture.
Utah Department of Agriculture.
Wyoming Department of Agriculture.

DESIGNATED PRIVATE AGENCIES (56)

Aberdeen Grain Inspection, Inc.
Alton Grain Inspection Department.
Alva Grain Inspection Department.
Amarillo Grain Exchange, Inc.
J. W. Barton Grain Inspection Service, Inc.[1]
Bloomington Grain Inspection Department.
Cairo Grain Inspection Agency, Inc.
Central Iowa Grain Inspection Service, Inc.
Champaign-Danville Grain Inspection Departments, Inc.
Chattanooga Grain Inspection Company, Inc.[1]
Columbus Grain Inspection, Inc.
Decatur Grain Inspection, Inc.
Denver Grain Inspection.
Detroit Grain Inspection Service, Inc.
East Indiana Grain Inspection, Inc.
Eastern Iowa Grain Inspection and Weighing Service, Inc.
Enid Grain Inspection Company, Inc.
Erie Grain Inspection Service.
Farwell Grain Inspection Company.
Fostoria Grain Inspection.
Frankfort Grain Inspection, Inc.[1]
Fremont Grain Inspection Department, Inc.
Gibson City Grain Inspection Department.
Grain Inspection, Inc. (Jamestown).
Grand Forks Grain Inspection Department.
Hastings Grain Inspection, Inc.

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[1] Designated for both inspection and weighing services.

Idaho Grain Inspection Service.
Indianapolis Grain Inspection and Weighing Service, Inc.
Jinks Grain and Weighing Service.[2]
Kankakee Grain Inspection, Inc.
Keokuk Grain Inspection Service.
Lewiston Grain Inspection Service, Inc.
Lima Grain Inspection Service, Inc.
Lincoln Inspection Service, Inc.[4]
Little Rock Grain Exchange Trust.[3]
Los Angeles Grain Inspection Service, Inc.[4]
Louisville Grain Inspection Service, Inc.[4]
John R. McCrea Agency.
McGregor Grain Inspection and Weighing Corporation, Inc.
Memphis Grain and Hay Association.[5]
Michigan Grain Inspection Services, Inc.
Mid-Iowa Grain Inspection, Inc.
Minot Grain Inspection, Inc.
North Dakota Grain Inspection Service, Inc.
Ohio Valley Grain Inspection.
Omaha Grain Inspection Service, Inc.
Plainview Grain Inspection and Weighing Service, Inc.
Quincy Grain Inspection and Weighing Service.
D. R. Schaal Agency.
Schneider Inspection Service, Inc.
Sioux City Inspection and Weighing Agency, Inc.[4]
Southern Illinois Grain Inspection Service, Inc.
Springfield Grain Inspection Department.
A. V. Tischer and Son, Inc.[1]
Titus Grain Inspection, Inc.
Tri-State Grain Inspection Service, Inc.

OBJECT CLASSIFICATION TABLE

Mr. Whitten. Please provide for the record an object classification table for the user fee fund for fiscal years 1989, 1990 and 1991. Also, provide a table combining both user fee funds and appropriated funds for those same years.

Mr. Galliart. We will provide a table for the record.

[The information follows:]

TRUST FUNDS—CLASSIFICATION BY OBJECTS

[In thousands of dollars]

	1989 actual	1990 estimate	1991 estimate
Personnel compensation:			
Full-time permanent	$16,747	$19,890	$20,151
Other than full-time permanent	974	1,428	1,447
Other personnel compensation	4,460	3,482	3,482
Total personnel compensation	22,181	24,800	25,080
Personnel benefits: civilian	3,879	2,877	2,905
Benefits for former personnel	146	315	315
Travel and transportation of persons	1,210	1,039	1,039
Transportation of things	157	87	87
Rental payments to GSA	401	684	684
Rental payments to others	181	362	362
Communications, utilities, and miscellaneous charges	1,158	1,497	1,497
Printing and reproduction	149	152	152

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[2] Designated for weighing services only.
[3] Trust.
[4] Subsidiary/trust.
[5] Subsidiary.

TRUST FUNDS—CLASSIFICATION BY OBJECTS—Continued

[In thousands of dollars]

	1989 actual	1990 estimate	1991 estimate
Other services	4,035	3,513	4,029
Supplies and materials	670	484	484
Equipment	1,239	523	523
Land and structures	1	—	—
Insurance claims and indemnities	1	7	7
Interest and dividends	6	—	—
Total obligations	35,414	36,340	37,164

APPROPRIATED AND TRUST FUNDS—CLASSIFICATION BY OBJECTS

[In thousands of dollars]

	1989 actual	1990 estimate	1991 estimate
Personnel Compensation:			
Full-time permanent	$20,479	$24,052	$25,617
Other than full-time permanent	1,068	1,462	1,670
Other personnel compensation	4,559	3,577	3,584
Total personnel compensation	26,106	29,091	30,871
Personnel benefits: civilian	4,537	3,627	3,809
Benefits for former personnel	158	383	400
Travel and transportation of persons	1,486	1,439	1,448
Transportation of things	183	117	127
Rental payments to GSA	401	684	684
Rental payments to others	255	406	386
Communications, utilities, and miscellaneous charges	1,383	1,897	1,907
Printing and reproduction	178	239	182
Other services	5,490	4,863	5,758
Supplies and materials	840	764	782
Equipment	1,721	1,008	1,246
Land and structures	7	—	—
Insurance claims and indemnities	1	7	7
Interest and dividends	7	—	—
Total obligations	42,753	44,525	47,607

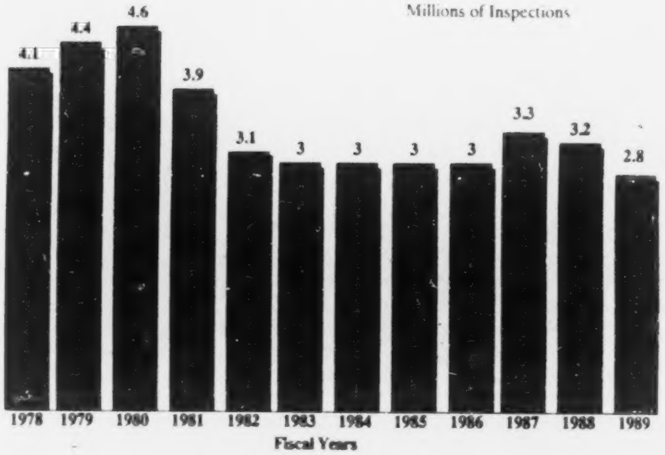
GRAIN EXPORTS

Mr. WHITTEN. For the record, please provide volume figures for grain exports inspected for each year of the past five years.

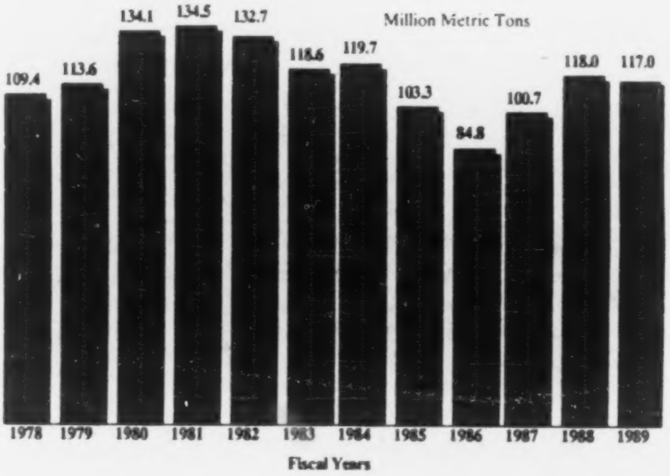
Mr. GALLIART. We will provide a graph for the record.

[The information follows:]

Number of Inspections Performed Under the U.S. Grain Standards Act



U.S. Agricultural Exports: Wheat, Coarse Grains, Soybeans, Rice, and Sunflower Seed



RESEARCH CONTRACTS

Mr. **Whitten**. What was the nature of each research contract executed by FGIS in fiscal year 1989? Who were the contracts placed with and what was the amount of each?

Mr. **Galliart**. I will supply a list of research contracts for fiscal year 1989 for the record.

[The information follows:]

Research contracts

Analysis of redefining grade factor for broken corn/foreign material in corn—Iowa State and University of Illinois	$20,000
Aflatoxin research—University of Georgia	2,000
Feasibility of whole grain near infrared analysis of coarse grains—Iowa State	10,000
Economic study on changing grading standards on sorghum—Economic Research Service	36,000
Economic study on changing grading standards on wheat—Economic Research Service	40,000
Wheat hardness tester—Vocational Services contract	80,620
Shriveled-wrinkled soybeans: determination and effect on processing—Iowa State	27,800
Develop single kernel hardness instrument—Agricultural Research Service	15,000
Unapproved tolerance study—Agricultural Marketing Service	50,000
Impact study on prohibiting recombining recirculation dust in export terminal elevators—Texas A&M	100,000
Ongoing contracts with funds added in fiscal year 1989:	
Biochemical detection of insect parts, stored grains—University of Texas	20,000

FIELD OFFICES

Mr. **Whitten**. You closed one field office in fiscal year 1989. Which office did you close? Specify your justification for closing this office. How many employees were affected by this change?

Mr. **Galliart**. The number of FGIS field offices declined by one in 1989 because we converted our Duluth Field Office to a suboffice under our Minneapolis Field Office.

The status of this office was changed because exports in the Duluth/Superior port have declined and are not expected to increase significantly.

No employees were adversely affected because we were able to reduce staffing through attrition.

OBJECT CLASS 23

Mr. **Whitten**. How is it you are able to decrease your rental payments to others from $74,000 in fiscal year 1989 to $24,000 in fiscal year 1991? At the same time you propose to increase communications, utilities and miscellaneous charge from $225,000 to $409,510. Please explain in more detail.

Mr. **Galliart**. In reality, there is no decrease in cost. This merely represents a shift in payments from the revolving fund to the appropriated fund. The Department pays for GSA space, and through the reapportionment process, FGIS costs would be less. Communications and utilities will increase as a direct result of program changes and remodeling at the Kansas City Technical Center. The alteration of inspection and weighing activities will result in an increase in telecommunication charges.

PRINTING AND REPRODUCTION

Mr. WHITTEN. Please explain the large increase in printing and reproduction in fiscal year 1990.

Mr. GALLIART. The printing costs for fiscal year 1990 include printing a number of quality reports which are distributed to industry and the public. We will also be reprinting the grain inspection and weighing certificates issued by the field offices. A substantial number of regulatory changes are pending and new directives and handbooks will need to be updated, reproduced, or reprinted during fiscal year 1990.

OTHER SERVICES

Mr. WHITTEN. Provide a sub-object class breakdown of object class 25, Other Services, for fiscal years 1989, 1990, 1991.

Mr. GALLIART. Activities in the other services area fluctuate between years in proportion to the level of contractual research, ADP services, and training. A table with this information will be provided for the record.

[The information follows:]

OTHER SERVICES

Object class and title		Actual 1989	Planned 1990	Request 1991
2523	Training	161,520	50,230	175,000
2542	Research	283,800	654,159	525,000
2560	ADP services	30,834	116,231	150,000
	All other	978,846	529,380	879,000
	Total	1,455,000	1,350,000	1,729,000

SUPPLIES AND MATERIALS

Mr. WHITTEN. Please explain the need to increase your budget by more than 75 percent in fiscal year 1991 over 1989 for supplies and materials.

Mr. GALLIART. New program initiatives and increases in ongoing program costs create the increase in this object class. Approximately 50 percent of this increase is for scientific supplies and materials that are in direct support of new program initiatives. Chemicals, materials, and hazardous waste disposal involved with the aflatoxin tests have increased. New "quick test" kits often require supplies that are not kept on hand or that may have an extremely short shelf-life during the analysis process. Included also are the costs for routine supplies and materials which have increased due to inflation.

EQUIPMENT

Mr. WHITTEN. You are proposing to increase your equipment budget from $485,000 in fiscal year 1990 to $723,100 in fiscal year 1991. Please justify this increase of $238,100 for the Committee.

Mr. GALLIART. Program initiatives for fiscal year 1991 will require the Agency to purchase new equipment. The Model Lab will need balances, scales, general laboratory equipment, and ADP related equipment. Equipment will be required as we test the prototype instrument to be developed for odor determination. Inflation for ongoing programs is also included in this increase.

PERSONNEL-RELATED

Mr. WHITTEN. Your total staff year level is proposed to increase by seven from fiscal year 1990 to fiscal year 1991, yet your total personnel compensation will increase $1.5 million. Please explain why you will need this $1.5 million increase in fiscal year 1991.

Mr. GALLIART. The increase in pay costs include the annualized pay increase for fiscal year 1990 as well as an increase for fiscal year 1991. We also included pay costs and benefits for the 13 staff years that we added to the Salaries and Expense programs. This sum also includes funds to cover temporary employees and overtime.

Mr. WHITTEN. Why do you anticipate compensation for former personnel to increase from $12,000 in fiscal year 1989, to $68,000 in fiscal year 1990 and $85,000 in fiscal year 1991?

Mr. GALLIART. Compensation for former personnel for fiscal year 1989 is based on actual charges, while we used estimates for outyears. The Office of Finance and Management provides estimates in their "Greenbook" projections. We then distribute the estimate between program areas.

AFLATOXIN IN GRAIN

Mr. WHITTEN. In testimony before this subcommittee last year, I asked if FGIS thought it necessary to start testing exported grain for aflatoxin contamination and your response was no. As part of the 1990 Farm Bill, USDA has a proposal to require that all exported corn be tested for aflatoxin. What has led to this change in policy over the past year?

Mr. GALLIART. Persistent reports last year of high levels of aflatoxin in the U.S. grown corn has prompted increased foreign buyer concern. Although the 1989/90 crop does not appear to be significantly affected by aflatoxin, mandatory testing is being recommended to restore confidence in the wholesomeness of the U.S. grown corn. Additionally, this recommendation demonstrates the seriousness of our commitment to marketing high quality grain.

Mr. WHITTEN. How much will it cost to implement and maintain this proposal?

Mr. GALLIART. Mandatory aflatoxin testing for corn exported from the United States will not have an impact on operating costs at the field level since we now assess fees for nearly 90 percent of the corn exported from the United States.

Mr. WHITTEN. Thank you very much. Our colleague Mr. Traxler has a question he would like answered for the record.

[The question and response follows:]

DRY BEAN STANDARD

Mr. TRAXLER. I want to thank you for the response you provided to me last month regarding the work you are doing to revise standards for dry beans so that they will be in line with the commercial realities of that commodity. Can you simply provide me with an update on how this matter is progressing, and when you expect this issue to be finalized?

Response. Work has been completed to change the inspection procedures so that Pea (Navy) beans affected by dirt and grime are no longer considered as damaged beans. The revised pages to the *Inspection Handbook—Dry Beans*, which will implement this procedural change, are scheduled to be printed by April 13.

Mr. Whitten. If there are no further questions, we thank you for your appearance here today.

For release only by the House
Committee on Appropriations

FEDERAL GRAIN INSPECTION SERVICE
Statement of
David R. Galliart
Acting Administrator

Before the
Subcommittee on Rural Development, Agriculture, and Related Agencies

Mr. Chairman and Members of the Committee:

We appreciate the opportunity to present the Federal Grain Inspection Service (FGIS) budget for fiscal year 1991.

In addition to our specific budget request, this presentation includes an overview of the Agency's mission and program for fiscal year 1989.

The total Agency budget request for FY 1991 is $47.6 million; the FY 1990 budget is $45.0 million. In this request, $10.4 million is for existing appropriated activities, new initiatives, and inflation. The fiscal year 1991 request includes:

- Standardization activities
- Compliance activities

- International monitoring
- Advisory Committee functions

New initiatives involve:

- Food safety
- Objective technologies
- Standards development

Inspection and Weighing activities, funded by user fees, are being requested at $37.2 million. In fiscal year 1989 revenues from user fees were $35.6 million; obligations were $35.4 million.

Legislation has been submitted for fiscal year 1991 to "recover costs of establishing standards and specifications for agricultural products." Sections within the U.S. Grain Standards Act (USGSA), the Agricultural Marketing Act of 1946 (AMA), and other Federal statutes will be amended by this Bill. FGIS operates under the USGSA and AMA.

The basis for the change in funding is that the standards provide a uniform language which facilitates marketing and provides a credible basis for trade among producers, traders, and buyers. The standards and the research upon which they are based are used primarily by the official inspection system which should bear the cost. Incremental costs to industry would result in an increase in the existing fee structure, and would be minimal compared to the benefits received.

The grain industry has recognized our previous and continued efforts to provide a cost effective user fee funded service. FGIS dependence on user fees has increased from 59 percent in fiscal year 1985 to 83 percent in fiscal year 1989. During this time, FGIS has improved both its service and its public perception as a governmental agency. We will continue to interact with the industry and solicit its support.

FGIS is addressing several issues in support of the proposed 1990 Farm Bill. For example, aflatoxin testing has increased dramatically this past year even though it is not required for domestic or foreign shipments. Testing procedures have been refined, standardized, and implemented. As part of the Departments Food Safety Program, the Farm Bill includes a recommendation that all corn that is exported from the United States be officially tested for aflatoxin.

Other grain quality proposals are included in the Miscellaneous Provisions of the proposed Farm Bill. These include: random testing of grain that may contain chemical residues from various sources such as insecticides, herbicides, and fumigants; separating broken corn from foreign material in the corn standards; separating broken kernels from foreign material in the sorghum standards; reevaluating the present limit of toxic seeds in grain; seeking other alternatives to the Office of Technology and Assessment's recommendation that the approval and oversight of official inspection equipment be transferred to the National Institute of Science and Technology; and conducting a study to determine whether to require mandatory retrofitting of dust collection systems to preclude the reintroduction of dust to the grain stream.

Our discussion for fiscal year 1991 will revolve around new program initiatives rather than the methods of funding.

Food safety initiatives involve mycotoxin detection, pesticide and chemical residues, and new methods to detect off-odor in grain. A considerable amount of time and work has been devoted to developing methods to test grain for natural or chemical contaminants, establishing specifications, evaluating commercial test kits, and training field personnel in the application of the kits. Several new aflatoxin test procedures were approved by FGIS in order to identify contaminated corn. The initial work this fiscal year in the area of pesticide residues will be used as a reference point that will be expanded in 1990 and increased in 1991.

Grain grading methodology work to establish more objective and improved procedures will continue. The Quality Assurance and Research Division's initiatives will include:

- continuing work on wheat classification.

- continuing work using near infrared reflectance and transmittance measurements to develop calibrations for protein, starch, and oil in corn.

- completing the final phase of a multi-year project to automate the Kansas City Technical Center. This project provides the basis for the FGIS Technical Center and field office data to be entered into a centralized system that will assist FGIS to better ensure the integrity, quality, and effectiveness of the national inspection system.

Additional initiatives involving equipment specifications and tolerances, single kernel moisture content, laboratory scale automation, cleaning grain, automating the grain inspection system, and a hardness-based classing system for wheat varieties are among the other grain grading initiatives.

Rapeseed (canola) is scheduled for standards development; rice and barley are scheduled for revisions in fiscal year 1991. Economic impact studies will be conducted to assess the potential impact on changes in standards for rice and rapeseed. Existing barley standards will be revised, as needed.

Quality assurance and management training will continue, with emphasis in providing high quality analytical services and cost effectiveness to the grain industry.

Dust explosion suppression is a continuing problem in the grain industry. The Department, in conjunction with other Federal agencies, has initiated a contract with Poland on explosion suppression. The Department anticipates applying the principles of suppressing coal dust explosions to grain dust.

INSPECTION AND WEIGHING SYSTEM

The official inspection system encompasses about 5,087 employees. Of this total, 879 are FGIS employees and 4,208 are non-Federal personnel employed by private agencies and States designated or delegated by FGIS to provide official inspection and weighing services. Direct on-line inspection and weighing of grain at 62 export elevators is provided by FGIS employees. Eight delegated States employ approximately 2,084 employees and provide mandatory official services at an additional 26 export elevators. Under direct FGIS oversight, the remaining 2,124 employees, employed by designated agencies, provide permissive inspection and weighing services.

FISCAL YEAR 1989 PROGRAM

During fiscal year 1989, FGIS inspected 112.1 million metric tons of export grain; this is slightly less than the 113.4 million metric tons inspected for export in fiscal year 1988. Overall, inspection and weighing activities were down, while the number of tests for aflatoxin inspections tripled.

Increased public awareness of the presence of aflatoxin in corn played a definitive role in FGIS programs in fiscal year 1989. Effort was concentrated on evaluating commercial aflatoxin test kits to determine suitability, consistency, and accuracy at the field level. Procedures were established and field employees were trained in the use of these kits.

The public awareness in food safety resulted in increased work on methods to identify pesticide and chemical residues in grain. A gas chromatograph/liquid chromatograph/mass spectrophotometer was purchased to develop a baseline which will be used to evaluate levels of common pesticides on grain and oilseeds. Evaluation of "quick" test kits for pesticides will begin soon thereafter.

The impact study on combining dockage and foreign material in wheat as a grading factor was completed and provided to the House and Senate this past June. Results from the report show that insufficient incentives exist for industry to cover the cost of additional cleaning of wheat. We will pursue the clean grain issue further in fiscal year 1991 when we issue a research agreement to assess the economic impact of "cleaning" grain as it moves from farm to market.

Soybean protein and oil testing services were announced and implemented along with a program for monitoring testing at all field locations.

The Agency published a CU-SUM (Uniform Shiplot and Combined Lot Inspection Plan) proposal to tighten the tolerances used to compensate for normal statistical variations, limit the number of field review inspections, and to average review inspection results as long as inspections are in statistical tolerance. We anticipate that the final regulation will be published during 1990.

The FGIS Advisory Committee, established under the USGSA to advise the Administrator on matters pertaining to the implementation of the United States Grain Standards Act, was active in fiscal year 1989. Issues addressed by the Committee included: domestic intermarket quality; uniform shiplot loading plan; soybean oil and protein testing; and the Office of Technology Assessment's grain study.

Methodology development in fiscal year 1989 included wheat hardness; biochemical detection of insects/insect parts in stored grains and processed grain products; economic impact studies on changing standards for wheat and sorghum; shriveled and wrinkled soybeans, and redefining grade factors for broken and/or foreign material in corn. Information gained from these activities will be put to use as the Agency moves into its fiscal year 1990 program.

Civil penalties totaling $20,000 were assessed against two grain facilities for deceptive loading practices. This is the first time the Agency has used civil penalties for violations of this type. There are several other cases being developed for similar action. The Agency has found that civil penalties are an effective administrative tool to affect a more timely action.

FGIS initiated further actions to implement the Grain Quality Improvement Act of 1986 (GQIA). The Agricultural Stabilization and Conservation Service (ASCS) agreed, through a cooperative agreement, to assist FGIS by reporting suspected violations of the GQIA in facilities which are examined by ASCS personnel, and by distributing, through county ASCS office operations, educational information about the GQIA to producers and warehousemen licensed under the U.S. Warehouse Act. The National Grain and Feed Association also cooperated with FGIS in the development of a poster explaining the GQIA provisions for distribution to the grain industry.

EQUAL EMPLOYMENT OPPORTUNITIES

FGIS is aggressively pursuing actions to assure implementation of its Affirmative Employment Plan. Program managers are active in establishing the plan and insuring that goals are achieved or exceeded.

FGIS contracts with small business 8(a), minority-owned firms for automated data processing services. In addition, work will continue on wheat classification projects with assistance from a vocational service organization which employs and trains the handicapped.

SAFETY

During fiscal year 1989, 10 grain dust explosions occurred. These resulted in five injuries and two fatalities. No Federal employees were involved in these explosions.

FOREIGN COMPLAINTS

Foreign complaints have been on a downward trend; there were 59 in fiscal year 1987, 35 in fiscal year 1988, and 25 in fiscal year 1989. Two complaints were filed alleging the presence of aflatoxin in corn. Investigation resulted in no verification of aflatoxin contamination. No wheat protein complaints were received during 1989, compared with 6 in 1988, and 15 in 1987.

CLOSING

Mr. Chairman, this concludes my testimony. I would be glad to answer any questions you or other members of the Committee may have at this time.

FEDERAL GRAIN INSPECTION SERVICE

Purpose Statement

The Federal Grain Inspection Service (FGIS) was established on November 20, 1976, pursuant to the U.S. Grain Standards Act (USGSA), as amended (Public Law 94-582). Subsequently, the USGSA has been amended several times. In 1977, it was amended to provide appropriated funding for field supervision. The Omnibus Budget Reconciliation Act of 1981 amended the USGSA to require user fee funding to support supervision and administration of the inspection and weighing programs previously covered by appropriations. Authority to collect user fees for supervision and administration activities and authority to invest retained earnings in interest bearing accounts has been extended through September 1993. The 1981 amendments also established an FGIS Advisory Committee to provide advice to the Administrator of FGIS on the implementation of the USGSA. Programs supporting the Grain Quality Improvement Act (GQIA) of 1986 continue. The GQIA provides a framework for establishing and monitoring improved standards in the quality of grain in the marketing chain.

Inspection and weighing programs are also carried out under the authority of the Agricultural Marketing Act of 1946 (AMA), as amended. Programs under the AMA include the inspection and grading of rice, dry beans, lentils, dry peas, processed grain products, hops, and related commodities.

The mission of FGIS is to facilitate the marketing of grain, oilseeds, pulses, rice, and related commodities by: (a) establishing descriptive standards and terms, (b) accurately and consistently certifying quality, (c) providing for uniform official inspection and weighing, (d) carrying out assigned regulatory and service responsibilities, and (e) providing the framework for commodity quality improvement incentives to both domestic and foreign buyers. Through these permissive and mandatory programs, FGIS assists in advancing the orderly and efficient marketing and effective distribution of U.S. grain and other assigned commodities from the Nation's farms to domestic and foreign buyers. FGIS, acting as an impartial third party, assures that the standards are applied and the weights are recorded in a fair and accurate manner, thereby facilitating domestic and foreign grain grading.

The amended U.S. Grain Standards Act requires: (1) mandatory inspection and weighing services at export ports by FGIS or delegated State agency personnel; and (2) permissive inspection and weighing services at domestic locations by designated State and private agency personnel. Currently, there are 8 delegated States among the 77 designated State and private agencies. The USGSA also requires FGIS to supervise all official inspection and weighing activities. Further, on a request basis, FGIS personnel perform inspection of rice and related commodities under the AMA and provide nationwide appeal inspection services.

The FGIS headquarters is located in Washington, D.C., with field activities located in 27 field offices, 2 Federal/State offices, and 7 suboffices in 24 States and Canada. As of September 30, 1989, FGIS employment totaled 750 full-time permanent employees and 110 part-time temporary and intermittent employees. Of the total, 119 full-time employees and 10 part-time and intermittent employees were located at headquarters while the remaining 631 full-time employees and 100 part-time and intermittent employees were assigned to field locations. The costs of nearly all field services and most headquarters activities are financed from fees charged for services performed. User fee activities accounted for 82 percent of total agency spending in FY 1989. Standardization and compliance activities, international monitoring, and the FGIS Advisory Committee are financed from appropriations.

FEDERAL GRAIN INSPECTION SERVICE

Available Funds and Staff-Years

1989 Actual and Estimated, 1990 and 1991

Item	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Salaries and Expenses	$8,115,000	119	$8,185,000	119	$10,443,000	132
Inspection and Weighing Services	35,414,000	697	36,856,000	681	37,164,000	675
Total, Federal Grain Inspection Service	43,529,000	816	45,041,000	800	47,607,000	807

Full-Time Equivalent Staff-Years:	1989 Actual	1990 Estimated	1991 Estimated
Ceiling	816	800	807
Non-ceiling	99	125	125
Total	915	925	932

FEDERAL GRAIN INSPECTION SERVICE

Permanent Positions by Grade and Staff-Year Summary

1989 and Estimated 1990 and 1991

Grade	1989			1990			1991		
	Headquarters	Field	Total	Headquarters	Field	Total	Headquarters	Field	Total
Executive Level V	1	--	1	1	--	1	1	--	1
ES-5	1	--	1	1	--	1	1	--	1
ES-3	1	--	1	1	--	1	1	--	1
GS/GM-15	4	--	4	4	--	4	4	--	4
GS/GM-14	18	--	18	19	--	19	19	--	19
GS/GM-13	31	12	43	29	12	41	30	20	50
GS-12	34	22	56	42	29	71	45	25	70
GS-11	9	92	101	9	101	110	10	113	123
GS-10	6	20	26	1	13	14	1	11	12
GS-9	14	216	230	14	247	261	15	249	264
GS-8	3	--	3	5	--	5	5	--	5
GS-7	8	34	42	16	14	30	11	13	24
GS-6	14	6	20	26	8	34	27	5	32
GS-5	20	125	145	15	133	148	15	132	147
GS-4	12	39	51	12	41	53	12	35	47
GS-3	2	2	4	3	3	6	3	3	6
GS-2	--	2	2	--	--	--	--	--	--
GS-1	--	--	--	--	--	--	--	--	--
Ungraded Positions	--	3	3	--	1	1	--	1	1
Total Permanent Positions	178	573	751	198	602	800	200	607	807
Staff-Years:									
Ceiling	175	641	816	172	628	800	200	607	807
Non-Ceiling	--	99	99	--	125	125	--	125	125
TOTAL	175	740	915	172	753	925	200	732	932

FEDERAL GRAIN INSPECTION SERVICE

Salaries and Expenses - Appropriated Funds

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

	1989	1990	1991
Personnel Compensation:			
Headquarters	$2,720,000	$2,971,000	$3,997,100
Field	1,205,000	1,320,000	1,794,000
11 Total personnel compensation	3,925,000	4,291,000	5,791,100
12 Personnel benefits	658,000	750,000	904,000
13 Benefits for former personnel	12,000	68,000	85,000
Total Personnel Compensation Benefits	4,595,000	5,109,000	6,780,100
Other Objects:			
21 Travel	276,000	400,000	409,315
22 Transportation of things	26,000	30,000	40,000
23.2 Rental payments to others	74,000	44,000	24,000
23.3 Communications, utilities, and misc. charges	225,000	400,000	409,510
24 Printing and reproduction	29,000	87,000	30,000
25 Other services	1,455,000	1,350,000	1,729,235
26 Supplies and materials	170,000	280,000	297,740
31 Equipment	482,000	485,000	723,100
32 Lands and Structures	6,000	—	—
43 Interest and dividends	1,000	—	—
Total other objects	2,744,000	3,076,000	3,662,900
Total direct obligations	$7,339,000	$8,185,000	$10,443,000

Position Data:

	1989	1990	1991
Average Salary, ES positions	**$75,400**	**$77,500**	**$80,200**
Average Salary, GM/GS positions	**$31,500**	**$32,600**	**$33,700**
Average Grade, GM/GS positions	**11.4**	**11.3**	**11.4**

FEDERAL GRAIN INSPECTION SERVICE

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Salaries and Expenses:

> For necessary expenses to carry out the provisions of the United States Grain Standards Act, as amended, and the standardization activities related to grain under the Agricultural Marketing Act of 1946, as amended, includ- ing field employment pursuant to section 706(a) of the Organic Act of 1944 (7 U.S.C. 2225), and not to exceed $20,000 for employment under 5 U.S.C. 3109, [$8,185,000] $10,443,000: Provided, That this appropriation shall be available pursuant to law (7 U.S.C. 2250) for the alteration and repair of buildings and improvements, but, unless otherwise provided, the cost of altering any one building during the fiscal year shall not exceed 10 per centum of the current replacement value of the building: Provided further, That none of the funds provided by this Act may be used to pay the salaries of any person or persons who require, or who authorize payments from fee-supported funds to any person or persons who require nonexport, non-terminal interior elevators to maintain records not involving official inspection or official weighing in the United States under Public Law 94-582 other than those necessary to fulfill the purposes of such Act.

FEDERAL GRAIN INSPECTION SERVICE

SALARIES AND EXPENSES — CURRENT LAW

Appropriation Act, 1990	$8,185,000
Budget Estimate, 1991	10,443,000
Increase in Appropriation	+2,258,000

SALARIES AND EXPENSES — PROPOSED LEGISLATION

Budget estimate, Current Law, 1991	$10,443,000
Change due to proposed legislation	-5,697,000
Net Request, President's 1991 Budget Request	4,746,000

SUMMARY OF INCREASES AND DECREASES - CURRENT LAW
(On basis of appropriation)

Item of Change	1990 Estimated	Pay Cost	Program Changes	1991 Estimated
Standardization Activities	$3,852,000	+$47,000	+$1,798,000	$5,697,000
Compliance Activities	4,333,000	+38,000	+ 375,000	4,746,000
Total Available	8,185,000	+85,000	+2,173,000	10,443,000

PROJECT STATEMENT - CURRENT LAW
(On basis of appropriation)

Project	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
Standardization Activities	$4,036,000	56	$3,852,000	56	+$1,845,000(1)	$5,697,000	63
Compliance Activities	3,303,000	63	4,333,000	63	413,000(2)	4,746,000	69
Total	7,339,000	119	8,185,000	119	+2,258,000	10,443,000	132
Unobligated balance	776,000	—	—	—	—	—	—
Total, Appropriation	8,115,000	119	8,185,000	119	+2,258,000	10,443,000	132

EXPLANATION OF PROGRAM

The appropriation "Salaries and Expenses" of the Federal Grain Inspection Service funds the standardization and compliance activities. The activities carried out are as follows:

1. Standardization Activities

FGIS standardization activities aid in the orderly marketing of grains, oilseeds, rice, and related commodities through the development, promulgation, and application of new and revised standards. Activities include the establishment, review, and revision of the standards to reflect the latest inspection techniques and marketing needs; development and evaluation of new instruments and methods to increase accuracy; operation of a nationwide quality control program to assure the integrity of the inspection certificate; and maintaining an international monitoring program which interacts with foreign governments and trade teams to exchange information and respond to complaints concerning quality and quantity of grain shipments.

Standardization Activities
Projected Level of Activity

	1989	1990	1991
U.S. Standards in effect at end of year	18	19	19
New and revised standards issued during fiscal year	7	5	5
Standards reviews in progress	9	6	5
Standards reviews completed	7	5	5
Inspection techniques developed	11	11	11
Equipment evaluated	10	10	9

2. Compliance Activities

The compliance activities ensure the accurate and uniform application of the U.S. Grain Standards Act (USGSA) and the applicable provisions of the Agricultural Marketing Act of 1946 (AMA). Field activities are reviewed to ensure that all procedures are implemented in a manner consistent with agency policy. Compliance activities include the delegation and designation of official agencies, the investigation of violations of the USGSA and AMA including referral of criminal violations to the Office of Inspector General, licensing of official agency personnel, and registering persons/firms engaged in foreign commerce.

Compliance Activities
Projected Level of Activity

	1989	1990	1991
Official Agency Actions:			
Agency delegations and designations in effect at end of fiscal year	77	77	77
Designations renewed	27	27	27
Designations cancelled	2	0	0
State delegations at export port locations in effect at end of fiscal year ..	8	8	8
Registration of Firms Exporting Grain:			
Registration certificates issued	96	100	100
On-site investigations	6	14	15

JUSTIFICATION OF INCREASE

(1) An increase of $1,845,000 in standardization activities ($3,852,000 available in 1990) consisting of:

(a) An increase of $83,000 for the 1989 pay raise and $47,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) An increase of $261,000 for food safety activities.

Need for Change. As consumers become more aware of toxins and chemical residues in the food chain, the demand for quantitative methods to assure food safety increases. The FDA establishes limits, FGIS develops regulatory standards, conducts analytical tests, and evaluates commercial screening kits.

Ongoing research within FDA and USDA makes it imperative that toxins and residues be identified by objective, quantitative methods early in the marketing chain.

Nature of Change. Work will begin on evaluating commercially available quantitative assays and in developing accurate, reliable screening methods for aflatoxins, other mycotoxins, and chemical residues in grain. Current assays are time consuming and not comprehensive enough to identify multiple toxins or residues. Testing methods will be developed for field use.

(b) An increase of $853,000 for seven initiatives targeted at increasing grain-grading precision.

Need for Change. Current grain grading methodology is subjective rather than objective. The grain inspection system needs to be state-of-the-art if our grain is to remain of a consistently high quality on the open market. Increased inflation and the need to keep consumer costs down mandates that test methods be fast, uniform, and inexpensive. FGIS must look toward an inspection system to meet the needs of U.S. Agriculture in the 21st century.

Nature of Change. Work will continue on near infrared measurement of protein, starch, and oil in corn. Additional staff and equipment will be required as protocol is established, standards are developed, and equipment is calibrated. Funds will be used for establishing and equipping a model laboratory at the Kansas City Tech Center. This lab will include sample analysis using robotics, image analysis, and other highly mechanized equipment. A portion of these funds will be used to evaluate and then build a computerized/TV camera-type image analysis system for grain grading. This prototype would take a picture of the grain being sampled, then transmit the image to a computer that has been programmed to recognize grain characteristics and standards. The samples would be graded and inspected automatically and objectively.

(c) An increase of $200,000 to develop and review commodity standards.

Need for Change. FGIS re-evaluates commodity standards as a continuing function. Current standards have been published for comment; analysis of comments indicates there is a need to determine the economic impact to the industry as revised standards are established.

Nature of Change. Funds will be used to conduct economic impact studies on rapeseed, rapeseed oil, rice, and barley as they enter the market chain.

(d) An increase of $175,000 for management and quality assurance training.

Need for Change. Increased quality and productivity is essential if the Agency is to continue to provide a high quality, cost effective service.

Nature of Change. FGIS will establish an organizational culture that emphasizes quality at all levels. Employees will be trained to promote quality in all aspects of their positions. Quality Assurance specialists at the field level will be trained on a regularly scheduled basis in state-of-the-art technology and procedures.

(e) An increase of $226,000 for increased operating costs.

(2) An increase of $413,000 for compliance activities ($4,333,000 available in FY 1990) consisting of:

(a) An increase of $67,000 for the 1989 pay raise and $36,000 which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise are being absorbed.

(b) An increase of $50,000 for grain dust explosion suppression work.

Need for Change. The Department's Safety Subcommittee recommended further study into methods to prevent or suppress grain dust explosions. To complete the Grain Quality Improvement Act, a study on recombining dust once removed from grain will require implementation in fiscal 1991.

Nature of Change. The Agency, in cooperation with other federal agencies, will participate in an agreement with Poland and the USSR on ways of applying coal dust explosion suppression to grain dust. $25,000 has been identified for this agreement. In fiscal 1989 FGIS contracted for research on prohibiting the recombination of recirculating grain dust at export elevators. This research will be completed in fiscal 1990 and $25,000 of this request will be used to implement those findings in fiscal 1991.

(c) An increase of $50,000 for an economic impact study on methods of cleaning grain.

Need for Change. Current procedures for cleaning grain are broad in nature. Cleaning procedures need to be objective, consistent, and uniform. Recent studies by OTA, a Wheat Dockage Study, and producer groups indicate a need for work in this area.

Nature of Change. These funds will be used to conduct an economic analysis study on the impact of cleaning grain at various points as it moves from the farm to the market place.

(d) An increase of $22,000 to complete the Grain Inspection Monitoring System.

Need for Change. Grain inspection and grading data are currently manually recorded, collected, and key punched. This is time consuming and costly.

Nature of Change. This phase of GIMS will create a field-to-headquarters data entry and transmission system. This system will provide oversight of official inspection and ensure uniform application of the U.S. Grain Standards.

(e) An increase of $188,000 for increased operating costs.

Federal Grain Inspection Service
Summary of Proposed Legislation

SUMMARY OF INCREASES AND DECREASES - PROPOSED LEGISLATION

Item of Change	1991 Current Law	Program Changes	President's Request
Standardization Activities............	$5,697,000	-$5,697,000	—
Compliance Activities.................	4,746,000	—	$4,746,000
Total Available....................	$10,443,000	-$5,697,000	$4,746,000

Explanation of Proposed Legislation

Standardization activities initiated by the Federal Grain Inspection Service support the orderly marketing of grains, oilseeds, rice, and related commodities by developing and disseminating, new and/or revised standards. This proposal would initiate user fees for these activities to charge the beneficiaries of these services for the costs incurred. These costs will be added to our existing fee structure and will be adjusted yearly for inflation and salary increases.

Compliance activities provide oversight to FGIS programs and will remain appropriated.

Federal Grain Inspection Service
GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 and Estimated 1990 and 1991

	FY 1989		FY 1990		FY 1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Alabama	$88,000	2	$121,000	2	$155,000	2
Arkansas	14,000	—	6,000	—	7,000	—
California	52,000	—	41,000	—	51,000	—
District of Columbia .	2,933,000	49	3,541,000	49	4,494,000	56
Georgia	2,000	—	3,000	—	3,000	—
Idaho	46,000	1	53,000	1	62,000	1
Illinois	159,000	4	254,000	4	320,000	4
Indiana	98,000	2	128,000	2	156,000	3
Iowa	124,000	2	134,000	2	160,000	3
Kansas	149,000	5	269,000	5	320,000	5
Louisiana	19,000	1	30,000	1	38,000	1
Maryland	44,000	1	63,000	1	79,000	1
Michigan	48,000	1	52,000	1	62,000	1
Minnesota	107,000	3	208,000	3	260,000	3
Mississippi	—	—	1,000	—	1,000	—
Missouri	3,014,000	40	2,768,000	40	3,627,000	44
Nebraska	159,000	3	219,000	3	260,000	3
North Dakota	56,000	1	39,000	1	50,000	1
Ohio	30,000	1	48,000	1	60,000	1
Oregon	6,000	—	8,000	—	7,000	—
Pennsylvania	—	—	—	—	—	—
Tennessee	12,000	—	23,000	—	29,000	—
Texas	107,000	2	107,000	2	155,000	2
Virginia	—	—	1,000	—	1,000	—
Washington	72,000	1	68,000	1	86,000	1
Total, Available or Estimate	$7,339,000	119	$8,185,000	119	$10,443,000	132

FEDERAL GRAIN INSPECTION SERVICE

SALARIES AND EXPENSES

STATUS OF PROGRAM

Current activities, progress, and programs for standardization and compliance activities are outlined below:

STANDARDIZATION ACTIVITIES

Current Activities: The Federal Grain Inspection Service (FGIS) compiles data for developing new and updating existing grading standards, and evaluates new methodology and equipment for determining and assuring grain quality. The Agency provides reference standards for official grading procedures.

Selected Examples of Recent Progress:

1. Quality Control. FGIS is responsible for the maintenance of a system of activities that assures a quality product that meets the needs of users with consistency and integrity. This system involves integrating several related processes including establishing specifications, evaluating data to establish if the test is in conformance with the specifications, and revising specifications to meet changing market needs.

   The analysis of the protein and oil content in soybeans was implemented September 4, 1989, along with a program for monitoring all field locations.

   Other new activities included aflatoxin monitoring of field results on corn testing, and evaluation of four near-infrared reflectance instruments for determining soybean, oil, and protein content.

2. Methodology Development. A number of aflatoxin test kits were evaluated at the Kansas City Technical Center. Several methods were approved for official use, one of which provides quantitative results. Field office personnel have been trained on the procedures for those kits selected for use by FGIS. Those kits significantly reduce the use of the hazardous chemicals required when testing by the Holiday - Velasco minicolumn or thin-layer chromatography methods.

   Work is continuing on the development of an objective wheat classification method. Over the past two crop years, approximately 27,000 samples have been analyzed. Analysis involves operating and maintaining three different prototype single-kernal hardness testers developed separately by the ARS Instrument Research Laboratory, Beltsville, MD; ARS Grain Marketing Research Laboratory, Manhattan, KS; and Kansas State University, Manhattan, KS. Two of the three prototype instruments were used for one crop year on approximately 12,000 samples. Analysis of preliminary data has revealed some major problems which will have to be resolved before hardness can be implemented as a wheat classification method.

   Pesticide residues are becoming a concern to importers and exporters of grain. FGIS recently purchased "state of the art" gas chromatograph/liquid chromatograph/mass spectrophotometer equipment for analysis of grain for pesticide residues. FGIS will survey grain moving through commercial channels for pesticide residues to develop a baseline. This equipment will be utilized to evaluate the accuracy of commercially available "quick screening" test kits for chemical residues.

3. International Monitoring. Activities of the International Monitoring Staff during FY 1989 included visits to 21 countries in Europe, Asia, Africa, the Near East, Middle East, North, and South America, and the Pacific. These visits were to participate in grain quality seminars, foreign trade meetings and grain grading seminars, and to respond to foreign complaints.

Activities in Washington included meetings with members of 35 foreign trade teams from 23 countries in Europe, Asia, Africa, Latin America, and the Pacific. The staff received 25 foreign complaints, of which 24 involved quality and one pertained to quantity.

COMPLIANCE ACTIVITIES

Current Activities: The compliance program is designed to ensure the accurate and uniform application of the USGSA and applicable provisions of the AMA. The compliance program functions include: (1) evaluating alleged violations, initiating preliminary investigations, and initiating enforcement/administrative action for violations; (2) conducting management and technical reviews and initiating appropriate corrective action; (3) administering the program for delegating State agencies and designating private agencies performing official functions and monitoring their performance; (4) identifying and, where appropriate, exempting and monitoring official agency and licensee conflicts of interest; (5) licensing personnel of delegated States and designated agencies; (6) registering persons/firms engaged in buying grain for sale in foreign commerce and engaged in handling, weighing, and transporting of grain for sale in foreign commerce; (7) responding to audits of FGIS programs; and, (8) reviewing and, when appropriate, approving official agencies' fee schedules.

Selected Examples of Recent Progress:

1. Reviews. FGIS field offices conduct annual onsite management reviews of each agency performing official services. Agencies may be reviewed more often at the field office manager's discretion. In FY 1989, headquarters personnel conducted onsite reviews of 11 field office circuits and 10 official agencies to evaluate management effectiveness and program compliance.

   In response to the Department's concern towards identifying discrimination in the delivery and performance of services, FGIS continues to interview applicants for service and official personnel in its reviews of field office operations. During FY 1989, no indications of discrimination were identified.

2. Delegations and Designations. There are 77 State and private agencies designated to provide official services at interior locations within the United States. Eight of these agencies are States delegated to perform official inspection and weighing services at export locations. Under triennial renewal procedures, 27 agency designations were automatically terminated in FY 1989, and all were renewed after a complete review of their performance. Two agencies canceled their designation voluntarily. The geographic area serviced by one agency will be reassigned. FGIS is not designating a new agency in the second geographic area because comments received indicated a replacement agency is not needed. Requests for service from this area are now handled by neighboring agencies.

   Out of seven agencies granted discretionary conflict of interest waivers, six continue to operate without significant problems. The seventh agency requested that its designation be allowed to terminate due to organizational and management problems affecting its conflict of interest status. A replacement agency will be assigned to this geographic area.

3. Case Activity. At the beginning of FY 1989, 15 cases involving alleged violations of the USGSA and AMA were pending further action. During FY 1989, 23 cases were opened and 20 cases were closed, leaving 18 cases pending action at the end of FY 1989. Alleged violations in these cases included deceptive loading practices; improper performance of official duties; improper sampling; improper procedures used in the interim designation of an official agency; harassment, improper influence, and assault of official personnel; exporting without official certificates;

and a violation of the Grain Quality Improvement Act. Of the 23 cases opened during FY 1989, FGIS personnel at headquarters conducted 6 onsite investigations, the Office of Inspector General (OIG) conducted 3 investigations, and the remaining cases were addressed by evaluating information submitted by field office personnel. Of the 20 cases closed, 16 were closed after appropriate administrative actions were taken, and 4 were closed due to insufficient evidence to substantiate a violation.

Civil Penalties. During FY 1989, FGIS assessed its first two civil penalties against two grain facilities for deceptive loading practices. The Office of General Counsel (OGC) negotiated settlements with both facilities. One firm paid $9,000 and was denied official services for 3 days for loading 20 railcars of economically superior corn on top of economically inferior corn so that a true average sample could not be obtained thus causing the issuance of false certificates. The second firm paid an $11,000 penalty for loading railcar shipments of soybeans in a deceptive manner. FGIS is working with OGC to initiate two more civil penalty requests for deceptive loading practices.

Revocation Proceedings. FGIS took administrative action against a sampler's license with the issuance of a Tentative Decision and Order proposing to revoke the license for improper performance of duties. At the close of FY 1989, the Final Decision and Order is pending approval.

4. Grain Quality Improvement Act (GQIA). During FY 1989, FGIS monitored GQIA compliance through onsite reviews of field operations and interviews with elevator managers and official agency personnel. The Agricultural Stabilization and Conservation Service (ASCS) has agreed, through a cooperative agreement, to assist FGIS in implementing the GQIA by (1) reporting suspected GQIA violations in facilities which are examined by ASCS personnel and (2) distributing through county ASCS office operations, educational information about the GQIA to producers and warehousemen licensed under the U.S. Warehouse Act. The National Grain and Feed Association also cooperated with FGIS to develop a poster explaining the GQIA provisions and then provided FGIS with a grain industry mailing list to distribute the poster.

5. Witness Litigation. Seventeen actions were handled involving requests for FGIS personnel to appear as witnesses in judicial and adminstrative proceedings, to give written or oral depositions, or to supply official records.

6. Registration. During calendar year 1989, 96 Certificates of Registration were issued to grain firms.

The estimates include appropriation language for this item as follows (new lanaguage underscored; deleted matter enclosed in brackets):

INSPECTION AND WEIGHING SERVICES

Limitation of Inspection and Weighing Service Expenses:

> Not to exceed [$36,856,000] $37,164,000 (from fees collected) shall be obligated during the current fiscal year for Inspection and Weighing Services: Provided, that, if grain export activities require additional supervision and oversight and/or other uncontrollable factors occur, this limitation may be exceeded by up to 10 percentum.

This change in language is to provide authority to exceed the current limitation if necessary.

INSPECTION AND WEIGHING SERVICES - CURRENT LAW

Obligations, 1990	$36,856,000
Budget Estimate, 1991	37,164,000
Change in Obligations	+308,000

INSPECTION AND WEIGHING - PROPOSED LEGISLATION

Budget estimate, Current Law, 1991	$37,164,000
Change due to proposed legislation	+5,697,000
Net Request, President's 1991 Budget Request....................	42,861,000

Explanation of Proposed Legislation

This legislation reflects a proposed increase in user collections to recover costs related to standardization activities. Current programs for establishing standards and specification support the marketing of grains, oilseeds, rice, and related commodities by developing and disseminating new and/or revised, standards.

SUMMARY OF INCREASES AND DECREASES — CURRENT LAW

	1990 Estimated	Program Change	1991 Estimated
Inspection and Weighing Activities	$36,856,000	+$308,000	$37,164,000

Project	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff Years
Insp. & Weigh. Activities....	$35,414,000	697	$36,856,000	681	+$308,000	$37,164,000	675
Unobligated balance avail. start of period	-14,037,034	—	-14,249,034	—	—	-14,249,034	—
Unobligated balance avail. end of period..	14,249,034	—	14,249,034	--	—	14,249,034	—
Collections	35,414,000	697	36,856,000	681	+308,000 (1)	37,164,000	675
Actual Collections....	35,626,000	697	36,856,000	681	+308,000	37,164,000	675

EXPLANATION OF PROGRAM

The Federal Grain Inspection Service (FGIS) provides an official grain inspection and weighing system under the U.S. Grain Standards Act (USGSA), as amended, and official inspection of rice and grain related products under the Agricultural Marketing Act of 1946 (AMA), as amended. The USGSA was reauthorized in 1988 permitting FGIS to continue to collect user fees to fund the costs associated with the operation, supervision, and administration of Federal grain inspection and weighing activities.

Fees collected under the USGSA and the AMA pay the expenses of the following programs:

1. Inspection Activities

Fee supported inspection activities under the USGSA include direct services as well as the supervision and administration function associated with the program. Direct services include mandatory official inspection of export grain by FGIS employees at certain export points and when requested the inspection of U.S. grain shipped through the interior and Canada. FGIS also provides an appeal service for original grain inspection. The FGIS supervision program provides oversight of its employees as well as the monitoring of the inspection activities of 8 delegated States and 79 designated State and private agencies. In addition, FGIS provides inspection services for rice and grain related products which are covered by the AMA. FGIS personnel provide the technical and administrative support for the program.

Projected Level of Activity

	1989	1990	1991
Quantity of Grain Officially Inspected (million metric tons)			
For Export by Federal Personnel	87.1	88.1	88.1
by Delegated State Personnel	27.0	27.0	27.0
Domestically	183.6	183.0	183.0
Total	297.7	298.0	298.0
Number of Inspections and Reinspections			
By Federal Personnel	198,967	200,000	200,000
By Delegated State/Official Agency Licensees	2,620,408	2,600,000	2,600,000
Number of Appeals	18,000	13,000	13,000
Number of Appeals Carried to the Board of Appeals and Review	1,226	1,300	1,300
Quantity of Rice Inspected (million metric tons)	4.3	4.1	4.1
Quantity of Rice Exports (million metric tons)	2.9	2.5	2.6

2. Weighing Activities

Fee supported weighing activities under the USGSA include the direct services as well as the supervision and administration functions associated with the program. FGIS provides mandatory weighing of export grain. Upon request, FGIS may provide weighing services in the interior and on export shipments to Mexico. FGIS also offers supervision of weighing services by request on inbound grain at export points, a nationwide scale testing program and a separate scale testing program designed for railroad track scales. In addition to supervising its own employees, FGIS monitors the weighing activities of employees of eight delegated States and certain designated State and private agencies performing weighing activities. FGIS personnel provide the technical and administrative support for the weighing program.

Projected Level of Activity

	1989	1990	1991
Export Grain Weighed (million metric tons)			
By Federal Personnel	85.1	85.1	85.1
By Delegated State Personnel	27.0	27.0	27.0

OIG Audits

50099-5y-Hy 11-Sept-89 "(Draft) Foreign Complaints on U.S. Grain Exports"

JUSTIFICATION OF INCREASE

(1) An increase of $308,000 to cover increased operating costs.

(a) An increase of $308,000 to cover pay costs, benefits, and inflation.

Need for Change. The current limitation for Inspection and Weighing activities needs to be changed to reflect yearly increases in operating costs.

The actual obligations in fiscal year 1989 were $35,414,000 and could exceed the $36,856,000 ceiling by fiscal year 1991.

Nature of Change. This increase will be used to cover operating costs such as pay, benefits, and inflation.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 and Estimated 1990 and 1991

	FY 1989		FY 1990		FY 1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Alabama	$490,000	8	$426,000	8	$426,000	8
Arkansas	1,254,000	43	1,356,000	43	1,356,000	42
California	69,000	1	96,000	1	100,000	1
District of Columbia .	7,251,000	146	8,626,000	138	8,700,000	137
Georgia	170,000	6	217,000	6	220,000	4
Idaho	205,000	4	229,000	4	230,000	4
Illinois	1,031,000	23	1,019,000	23	1,040,000	22
Indiana	234,000	5	253,000	5	255,000	5
Iowa	238,000	5	286,000	5	290,000	5
Kansas	486,000	7	605,000	7	615,000	7
Louisiana	9,622,000	117	9,611,000	114	9,675,000	114
Maryland	2,144,000	57	2,263,000	57	2,265,000	57
Michigan	262,000	5	225,000	5	225,000	5
Minnesota	485,000	11	559,000	11	600,000	11
Mississippi	304,000	12	382,000	12	385,000	12
Missouri	1,935,000	7	490,000	7	490,000	7
Nebraska	347,000	4	337,000	4	340,000	4
North Dakota	246,000	6	339,000	6	345,000	6
Ohio	857,000	18	701,000	18	701,000	18
Oregon	2,680,000	94	3,380,000	94	3,400,000	94
Pennsylvania	—	—	60,000	—	60,000	—
Tennessee	101,000	2	91,000	2	95,000	1
Texas	4,615,000	110	4,880,000	105	4,915,000	105
Virginia	—	—	4,000	—	6,000	—
Washington	105,000	3	127,000	3	130,000	3
Total States	35,131,000	694	36,562,000	678	36,864,000	672
Canada	283,000	3	294,000	3	300,000	3
Total, Available or Estimate	35,414,000	697	36,856,000	681	37,164,000	675

FEDERAL GRAIN INSPECTION SERVICE

INSPECTION AND WEIGHING SERVICES

STATUS OF PROGRAM

The U.S. Grain Standards Act of 1976 (USGSA) was amended in 1981 to authorize user fee funding for supervision and administration expenses starting October 1, 1981. Authority to collect user fees for supervision and administration activities and authority to invest retained earnings in interest bearing accounts has been extended through September 1993. The FGIS operating budget was approximately 82 percent fee supported in FY 1989.

Current Activities: The USGSA requires, with minor exceptions, that all grain exported by grade must be officially inspected and weighed. FGIS employees and licensed employees of delegated State agencies perform original inspection and weighing services at export port locations in the United States and Canada. Grain which is not being exported may be inspected at interior locations on a request basis by licensed employees of designated State and private agencies. FGIS employees on a request basis, perform original inspection and weighing services on grain, oilseeds, pulses, rice, and related grain commodities. FGIS employees supervise and provide oversight for inspectors performing official services.

FGIS will continue to develop new inspection and weighing services while continuing to seek additional ways of reducing costs.

Selected Examples of Recent Progress:

1. Soybean Protein and Oil. FGIS received and analyzed comments on oil and protein testing of soybeans. The final notice was published in the Federal Register. The Agency published and distributed Grain Inspection Handbook, Book VI, Soybean Protein and Oil.

2. ADP Monitoring of Electronic Weighing Systems. Design parameters were develop on an automatic weighing system that will not require 100 percent supervision. In FY 1990 the Agency will publish these parameters for comment by the industry and trade organizations.

3. Impact Study on Combining Dockage and Foreign Material in Wheat. Report submitted on June 1, 1989, to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate, indicate concerns that: (1) wheat generally contains less foreign material than dockage; (2) a majority of U.S. wheat contains foreign material within the U.S. No. 1 grade limit; (3) shifts in numerical grade designations occur (better quality becomes lower quality) when dockage and foreign material are combined as a grading factor and (lower quality becomes better quality); and (4) the wheat industry supports efforts to market cleaner wheat. Currently, no consensus exists on how to achieve this goal nor whether the cost of achieving cleaner wheat would be offset by making U.S. wheat more competitive or helping to prevent market erosion.

4. Commodity Testing and Evaluation, Procedures and Methods Handbook. Various testing procedures and methods were compiled. Material was reviewed to ensure that emphasis was directed towards quality assurance and quality of data, applicability to safety and hazardous chemical disposal, and that standard operating procedures were easily applied. Final draft is pending review and comment.

5. Sorghum Standards Revisions. In response to the Grain Quality Improvement Act requirement to separate and define individual components of broken kernels, foreign material, and other grains in sorghum, FGIS published a proposal to separate broken kernel and foreign material into two components and establish factor limits for each component.

TUESDAY, MARCH 20, 1990.

AGRICULTURAL COOPERATIVE SERVICE

WITNESSES

JO ANN SMITH, ASSISTANT SECRETARY FOR MARKETING AND INSPECTION SERVICES

RANDALL E. TORGERSON, ADMINISTRATOR, AGRICULTURAL COOPERATIVE SERVICE

JAMES E. HASKELL, DEPUTY ADMINISTRATOR

MICHAEL C. GREGOIRE, ACTING DIRECTOR, BUDGET AND ACCOUNTING DIVISION, ANIMAL AND PLANT HEALTH INSPECTION SERVICE

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Mr. AKAKA [assuming chair]. The Chairman has announced that we will recess until we have finished with the votes. I understand it might take about 40 minutes, so relax and we will see you.

[Recess.]

Mr. AKAKA. The subcommittee will come to order.

We are very happy to welcome our latest panel. I want to thank you for being patient. I didn't realize it was going to take this long. But we are happy to have you and we will accept your testimony and include it in the record in its entirety and ask you to present your testimony at this time.

Ms. SMITH. Thank you, Mr. Chairman.

We are pleased to be here this afternoon. I think you are very familiar with the Agricultural Cooperative Service and its function. I would like at this time to introduce to you Dr. Torgerson, the Administrator, who will have further comments on the budget.

Mr. AKAKA. Thank you very much.

Dr. Torgerson?

Dr. TORGERSON. Thank you. I am happy to have the opportunity to present our testimony for fiscal year 1991 for the Agricultural Cooperative Service. I would like to introduce my colleagues who are with me today: Dr. Jim Haskell, Deputy Administrator; and Mike Gregoire, who is Acting Director of the Budget and Accounting Division of the Animal and Plant Health Inspection Service. With your permission I would like to briefly summarize my statement so that we can proceed with the questions.

Mr. AKAKA. Please do that.

OPENING STATEMENT

Dr. TORGERSON. The role and mission of the Agricultural Cooperative Service is to maintain and strengthen farm income and to help producers achieve fair returns based on their productivity and investment, as well as to help create a more favorable climate for this cooperative activity to occur.

The agency serves as the Department's focal point in providing research and technical assistance and education to our farmer-owned cooperatives throughout the United States. ACS is a separate agency to which the Secretary has delegated responsibility of carrying out the functions directed by Congress in the Cooperative Marketing Act of 1926. Our work is designed to bring about more efficient and effective cooperative operations in support of farm families in agriculture in rural communities. ACS also serves as a focal point for collection and dissemination of statistics on farmer cooperatives and analysis of policy issues affecting these cooperatives.

We have seen cooperatives go through a significant adjustment period in the decade of the 1980s. Most recently the cooperative business volume rose 10 percent in 1988 to $66.4 billion. Net income for all cooperatives was $1.7 billion. The number of organizations, which are about 4,937 and their overall membership of 4.2 million, both attest to the continuing restructuring in the industries serving production agriculture. Many of these cooperatives have gone through a belt tightening process in the 1980s by reducing employment and disposing of unneeded and inefficient facilities, but they now appear considerably stronger financially than they did earlier in the decade when they were experiencing some pretty traumatic operating conditions.

RESEARCH

During this past year, Mr. Chairman, the Agricultural Cooperative Service has completed research in a number of areas to help cooperatives better adjust to changing industry conditions. We were involved in 97 formal technical assistance projects in 1989, involving 119 different cooperative organizations. These varied from fishery organizations on the big island of Hawaii to catfish growers in Mississippi to developing Christmas tree marketing organizations in Ohio. Fifty-one projects involved emerging and developing cooperatives and producer groups representing more than 3,000 members.

The agency plays an important role in providing education on cooperatives to both domestic clientele as well as to foreign visitors. ACS educational publications are widely used, and our monthly magazine is viewed as a primary source of information for improved cooperative operations.

RURAL DEVELOPMENT

Congress charged the agency in its budget report in fiscal year 1989 to examine cooperatives role in rural development. That was spelled out as follows:

"The committee will expect the Agricultural Cooperative Service to undertake a study of the potential for cooperatives to expand their role in rural development through the provision of services, financing, and economic development to improve the quality of life in rural America."

That study was completed in November and submitted to Congress.

OVERALL BUDGET REQUEST

The fiscal year 1991 budget for the Agricultural Cooperative Service is $4.764 million, with a staff year ceiling of 69.

To continue to serve farmer cooperatives within a stable budget environment and somewhat inflationary times, several adjustments are being made. Only the highest priority research projects having the greatest applicability to cooperatives as a whole are being undertaken. The agency will continue its technical assistance program to existing cooperatives and our cooperative development activities including field operations in Hawaii, Ohio, and North Carolina.

Mr. Chairman, I thank you for this opportunity and I would be happy to respond to any question.

[CLERK'S NOTE.—Dr. Torgerson's biographical sketch appears on page 686. Dr. Torgerson's written statement appears on pages 687 through 690. The Agricultural Cooperative Service explanatory notes appear on pages 691 through 704.]

HILO OFFICE

Mr. **AKAKA**. Thank you very much, Dr. Torgerson. I want to commend you and ACS for all of your fine efforts of the organization in Washington, and in particular, the work of your ACS office in Hilo over the past year. I want to tell you that your effort out there has made a huge difference in the islands.

If I read the budget submission correctly, it appears that for the first time you are not requesting that the Hilo field office be terminated.

Dr. **TORGERSON**. That is correct.

Mr. **AKAKA**. And that is good news. My question is first, how did you get OMB to see the light about keeping the office open and second, is now that you are not facing proposed cuts, zeroing out of the program in Hilo, can you tell me whether you believe that the Hilo office is a wise investment.

Dr. **TORGERSON**. First of all, Mr. Chairman, it is very refreshing to come before the committee and not request our budget be cut in half or to be zeroed out. We are very pleased that the Administration in the Department of Agriculture was willing to go to bat for the agency and to request essentially a level budget for this year. This is a great improvement.

We think that the efforts in the islands have had a very measurable pay-off. The reason, in part, is because you have a relatively large number of smaller producers. What we are dealing with are relatively new cooperatives that are relatively small in size. These take a period of nurturing and cultivating an understanding of how to run a business on a cooperative basis. I think we have made very significant progress in this direction. So, in that sense, I think that the number of requests we continue to have and the nature of the activity we're involved with suggests to us that, indeed, it has been a very worthwhile investment and one that we should continue in the foreseeable future.

AGRICULTURAL DIVERSIFICATION

Mr. **Akaka**. Well, I should tell you that the message I get is that many of these small farmers are becoming dependent upon the excellent services that ACS provides. In a way, that makes me feel good that you are able to help them with their needs as small farms. With the decline of sugar and the growth of diversified agriculture, there is a move to increase small farms. Therefore, the kind of help that you provide becomes very, very important.

Do you foresee that demand for services of your agency will grow in the coming year because of this?

Dr. **Torgerson**. We see an increase in requests coming to the agency, not only in Hawaii but in other locations as well. I think there are a variety of reasons for why this is happening. First of all, there is an effort to move away from pineapples and sugar cane, toward other sources of cash farm income for growers. We are seeing this diversification in other areas of the continental United States as well. As you start growing these crops, the next question is, how are you going to market them? Often times an organization of a new cooperative is an answer. It allows the business to remain in growers' control and for them to reap benefits from having control of the product through further stages in the marketing process.

We see this happening in aquaculture. We see it happening in the use of certain natural resources through promotion efforts of the Soil Conservation Service's RC&D committees. We also see the Department giving emphasis to industrial crops, those that produce certain types of oils or other forms of fiber that can be used in agriculture to improve returns to growers. I think there is going to be continued activity in this area.

SERVICE TO HAWAII

Mr. **Akaka**. As an example of your success, one day I went to a supermarket here looking for ginger and I found this luscious ginger root and it was from Hawaii. When I traced it back, it came from the Big Island. And when I traced it further, they were farmers who became part of a cooperative because of ACS. I thought wow, that's a success story for me to be able to pick up quality ginger on the East Coast. I am sure there are other examples of your success out there, so this is the reason why I really commend you for your work.

My other question is, if you didn't have an office in Hilo, how would you serve the cooperatives in Hawaii and other places 5,000 miles from Washington, knowing full well that there is a five and six hour difference in time from Eastern Standard Time?

Dr. **Torgerson**. We would attempt to do it on a request basis, Mr. Akaka. But, given budget constraints, we would not be able to do so as intensively as we are now doing.

Mr. **Akaka**. So I am grateful to you, USDA, and I guess I have to admit to OMB for seeing the light. But I think the examples that are seen tell me that it is working real well and you are doing a great job. I want to commend you for that.

If you have received any correspondence—this is so that I can brag about it—from cooperatives which support your work in Hawaii, would you provide me some copies of that?

Dr. TORGERSON. I would be happy to.

[The information follows:]

Hawaii Ginger Commodity Group Association

July 30, 1986

Mr. Rick Garland
Agricultural Cooperative Service
Rm. 305 Federal Building
154 Waianuenue Ave.
Hilo, Hawaii 96720

Dear Rick:

We were very pleased that you could attend our Annual Dinner meeting last Friday evening.

Your remarks to the members were both timely and appropriate - thank you! I felt that there was a generally positive atmosphere throughout the evening. Everyone seemed to be in a good mood. Hopefully those who have not yet signed their 1986-87 Marketing Agreements will do so in the near future, although it will probably take a bit of prodding!

Best regards.

Sincerely,

Bill

W. C. "Bill" Pendered
Managing Director

Hilo Lagoon Centre, Suite 111 • 101 Aupuni Street • Hilo, Hawaii 96720 • Phone (808) 969-1777

UNIVERSITY OF HAWAII AT HILO
COLLEGE OF AGRICULTURE
STUDENT ASSOCIATION
CASA

May 3, 1985

Mr. Rick Garland
USDA, Agricultural Cooperative Service
Federal Building, room 305
Hilo, Hawaii 96720

Dear Mr. Garland,

The University of Hawaii College of Agriculture would like to express our thanks to those special people that have contributed to our education in the field of agriculture. Your seminar on Agricultural Cooperatives was a standout success and we are sincerely grateful to have you in our community.

The students here at UH-Hilo realize that we are very fortunate to have one of the few field offices across the nation, located in Hilo. We feel that your agency can contribute much to the realization of our agricultural potential in Hawaii County. We thank you personally for holding the very informitive seminar on Agricultural Cooperatives, and the USDA Agricultural Cooperative Service for being there when we need it. Please keep up the good work!

Sincerely,
Kelly Moran
Kelly Moran, Vice President

and members of the CASA Senate:

John P. Thomas
Matthew Wong

Denise Bernstein
Laurel S. Dekker

1400 KAPIOLANI STREET HILO, HAWAII 96720
TEL (808) 961-9519

DIVACO

DIVACO COOPERATIVE

30 KUKILA STREET • HILO, HAWAII 96720 • TELEPHONE 935-5415

March 28, 1989

Miss Jan Halkett
Agricultural Marketing Specialist
Agricultural Cooperative Service
154 Waianuenue Avenue, Room 305
Hilo, Hawaii 96720

Dear Miss Halettt:

The Board of Directors of the Hilo Cane Growers Cooperative, Ltd. would like to thank you for being our guest speaker at the general membership meeting.

Your lecture on the number of marketing, service and purchasing cooperatives in the United States as well as cooperative principles was very interesting and educational.

We hope in the future we may call on you again to speak at others cooperative general membership meeting.

Very truly yours,

Richard F. Fujioka

Richard F. Fujioka
General Manager

RFF/es

DIVERSIFIED AGRICULTURAL CONSUMERS COOPERATIVES

University of Hawaii at Hilo
COLLEGE OF AGRICULTURE

Jan E. Halkett
Agriculture Marketing Specialist
USDA
154 Waianuenue Avenue, Room 305
Hilo, Hawaii 96720

Dear Jan:

Thank you very much for speaking to my agriculture cooperative class at the University of Hawaii at Hilo. Your presentation was excellent and it enabled the class to understand problems related to Hawaiian Cooperatives. The students rated your presentation as one of the best and they will be able to apply many of the concepts presented to Cooperative Management. I am looking forward to your cooperation and participation in our newly developed agribusiness management program at the University of Hawaii at Hilo.

Sincerely Yours,

Sabry

Sabry Shehata
Associate Professor of Agricultural Economics

cc: Dr. Randy Torgerson, Administrator A.C.S. USDA
Mr. Tom Stafford, Divisional Director CDP

07 NOV REC'D

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Mauna Kea Agronomics INC.
P.O. Box 1210 • Hilo Hawaii 96720
Telephone (808) 961 2831
Telex 634326

October 6, 1986

Mr. John T. Haas
Director, Cooperative Development Division
Agricultural Cooperative Service
United States Department of Agriculture
Rm. 3300 Auditors Building
Washington, D.C. 20250

Dear Mr. Haas:

This letter is in reference to Mr. Rick Garland's outstanding efforts in working with the Hawaii Ginger Commodity Group Association. His hard work and invaluable knowledge have been instrumental in stressing the importance of the cooperative and how a strong organization can benefit all its members.

His sincere dedication and interest in the success of this new organization will enable its survival.

I have the highest regard for Rick and commend his work with all the commodity groups here. His office is an invaluable asset to our agricultural community

Best Regards,

Paul J K

Paul J. Kierkiewicz
President

OCT 15 RECD
CDD

Samuel L. Kealoha Jr.
Moloka'i Ice House Inc.
President
P.O. Box 990
Kaunakakai, Hi. 96748

March 16, 1989

Dr. Randy Torgerson
USDA-ACS
P.O. Box 96576
Washington, D.C.
20090-6576

Aloha Dr. Torgerson:

In behalf of the Moloka'i Ice House Inc., it gives me great pleasure in expressing our appreciation for the work and dedication shown us by Agriculture Marketing Specialist Ms. Jan Halkett and your entire Hilo office staff. Without Ms. Halkett's expertise and guidance, we would not be where we are today. Through her, we have been able to reach out and educate the Native Hawaiian community and the general public about the strengths and purposes of cooperatives. Her professionalism is appreciated by those of us who have had the privilige of working with her. Again, it is with pleasure that we write this letter of support for Ms. Halkett and her support staff in Hilo.

Aloha Pumehana,

Samuel L. Kealoha Jr.
President

cc: Honorable Senator Dan Inouye
Honorable Senator Spark Matsunaga
Honorable Representative Dan Akaka
Honorable Representative Pat Saiki
Honorable Governor John Waihee

Mr. **Akaka**. Thank you.

COOPERATIVE INDEPENDENCE

Dr. **Torgerson**. Our role in this whole effort is to try and make these growers more self-sustaining and independent and to grow their organization, so to speak, in the marketplace. I think as they do this and develop ther stature for marketing, like you expressed in the ginger example, that is the most gratifying feedback we can have because that is what we set out to do.

Mr. **Akaka**. I should also tell you another part of that story. When I traced it back, it went back to one of the farmers who was a student in a program that we had earlier to further develop farmers. He was not a farmer but he became interested and went through the program, was a good student, and through your cooperative program he became a ginger farmer. And another part of the success was that when we walked to his car and he got in it, it was a Mercedes. So I know he is doing well, and it is not only him, there are others who are doing well. For them to provide ginger root to the East Coast is, I think, quite a success.

Are you also servicing places beyond Hawaii with your program?

SERVICE BEYOND HAWAII

Dr. **Torgerson**. We have three field offices at the present time in Greenville, North Carolina; Columbus, Ohio; and Hilo. Are you referring to Micronesia and places beyond there?

Mr. **Akaka**. Yes, in the Pacific.

Dr. **Torgerson**. In times past, we have had occasional requests and we have had people on site there. But our resource base is such that we cannot afford to on a continuing basis. As a matter of fact, we have not had any requests of that nature in the last year and a half, if my memory serves me correctly.

Mr. **Akaka**. I asked that because I have had some people inquire about it. I didn't mention anything about it because I just wondered what your limits were. There is some interest from the South Pacific.

Well, thank you very much, Doctor Torgerson.

Mr. Chairman?

BUDGET REQUEST

Mr. **Whitten**. In your testimony you state, and I quote, "To continue to serve farmer cooperatives within a stable budget in inflationary times, several adjustments are being made." Please explain in some detail what these adjustments are and how they will better serve the farmer.

Dr. **Torgerson**. My statement means that with fewer real resources, we have to exercise increased diligence in the selection of research, technical assistance, and cooperative education projects we undertake. Some technical assistance requests will be denied; research that would benefit only certain segments of the cooperative community would not be initiated; and the number of educational workshops and director training programs will be scaled back. We have already cut back most of our work in poultry, livestock, and physical distribution. In addition, all cooperative research agreements with colleges and universities have been discontinued.

These changes mean that farmers will still receive benefits from the work of the Agricultural Cooperative Service—ACS—but that aggregate output to farmers will necessarily be reduced.

Mr. WHITTEN. Other agencies within the Department are requesting, as part of their increase for pay costs, an amount for the 1989 pay raise. You do not include an amount for this. Does this mean that you have absorbed this cost?

Dr. TORGERSON. Yes, that cost has been absorbed. For fiscal year 1991, we are requesting $50,000 for increased pay costs.

Mr. WHITTEN. What was your budget request to the Assistant Secretary, to the Department, and to OMB for fiscal year 1991?

Dr. TORGERSON. The ACS budget request for fiscal year 1991 to the Assistant Secretary and the Department was $7,952,000; and the request to the Office of Management and Budget was $4,893,000.

Mr. WHITTEN. Please update last year's breakout of the costs of each of the five basic parts of the Agricultural Cooperative Service to reflect 1989 actuals and to include fiscal year 1991 estimates.

Dr. TORGERSON. I will provide the information for the record.

[The information follows:]

Program area	1989 actual	1990 estimated	1991 proposed
Technical assistance	1,000,862	1,037,080	1,048,080
Cooperative development	682,406	707,100	714,600
Research	1,683,266	1,744,180	1,762,680
Cooperative statistics	636,912	659,960	666,960
Education-information	545,925	565,680	571,680
Total	4,549,371	4,714,000	4,764,000

FIELD OFFICES

Mr. WHITTEN. Dr. Torgerson, according to your explanatory notes you state that your Columbus, Ohio field office is presently vacant. How long has the office been vacant?

Dr. TORGERSON. The Columbus, Ohio field office is a new location for us and will be first occupied on April 9, 1990. It replaces the London, Kentucky field office which has been vacant since the untimely death of our field specialist in January 1989. The technical assistance work that will be handled out of the Columbus, Ohio office is currently being serviced out of the Washington, DC office. One project that had been serviced by the London, Kentucky office is now being handled by our Greenville, North Carolina office.

Mr. WHITTEN. I also note, in your geographical breakdown of obligations you show $18,779 for Kentucky in fiscal year 1989. What was this money used for?

Dr. TORGERSON. During FY 1989, we did maintain a field office in London, Kentucky. Although our Kentucky field specialist died during the second quarter of the fiscal year and we did not immediately replace him, some expenses, including salary support for the first 3 months of the year for the field office were incurred. In addition, office space and secretarial services were continued on a reduced rate until furniture and files were transferred to the newly established Columbus, Ohio office.

TECHNICAL ASSISTANCE

Mr. WHITTEN. The number of cooperatives served through technical assistance projects from 1988 to 1989 increased by nearly 16 percent. How does this compare to your statement that only existing cooperatives will be provided technical assistance?

Dr. TORGERSON. We are not proposing to limit our technical assistance to existing cooperatives. Such assistance will continue to be provided to emerging cooperatives and groups of producers wishing to form cooperatives. Indeed, much of the 16 percent increase in technical assistance requests from 1988 to 1989 came from these groups.

Mr. WHITTEN. Please list for the record the number of requests for technical assistance and the services rendered for fiscal year 1989.

Dr. TORGERSON. In FY 1989, 56 requests for technical assistance were received.

[The information follows:]

1.) Virginia-Carolina Peanut Farmers Cooperative, Franklin, VA - Guidance in evaluating and correcting operating problems.

2.) Aini O Loko Maika'i, Hana, HI - Assist in forming a marketing cooperative for fresh cut flowers.

3.) Wool Scouring Co-op, Inc., Witers, CA - Advise in the reorganization of the cooperative and develop financial and marketing plans.

4.) Minnesota Everlastings Cooperative, Henning, MN - Assist in developing a member payback program for dried flowers.

5.) Lakeview Center, Inc., Pensacola, FL - Assist in establishing a rabbit processing and marketing cooperative.

6.) Greenhouse Cooperative of Hawaii, Mt. View, HI - Conduct a financial review of the operating and capital plans.

7.) North Carolina Oilseed Cooperative, Inc., Angier, NC - Assist in organizing a marketing cooperative for primrose and other oilseeds.

8.) Bayshore Shellfish Cooperative, Eatontown, NJ - Assist in forming a cooperative to operate a clam depuration plant and market shellfish.

9.) Sleeping Bear Cherry Marketing Cooperative, Lake Leelanau, MI - Assist producers in developing a cherry marketing cooperative.

10.) South Carolina Producer Group, Barnwell, SC - Assist in forming a cooperative to pack and market vegetables.

11.) Ozark Table Grape Growers Association, Inc., Searcy, AR - Evaluate and develop plans for projected growth.

12.) Vegetable Marketing Cooperative Group, Mize, MS - Assist in organizing a vegetable packing and marketing cooperative.

13.) Northeast Processing Cooperative, Elizabeth City, NC - Assist producers in forming a cooperative to bargain with potato processors.

14.) Northeast Produce Cooperative, Camden, NC - Assist producers in forming a cooperative to market bagged potatoes.

15.) Downeast Blueberry Co., Inc., Pembroke, ME - Assist in organizing a marketing cooperative.

16.) Cobscook Bay Finfish Growers Association, Lubec, ME - Assist in organizing a cooperative.

17.) Greengold Marketing Cooperative, Billings, MT - Investigate the potential of converting a mobile alfalfa cubing operation to a cooperative.

18.) Ohio Valley Fruit and Vegetable Growers Association, New Richmond, OH - Assist in forming a wholesale marketing system.

19.) Maryland Watermen's Association, Annapolis, MD - Assist in establishing a watermen's cooperative.

20.) Hikiola Cooperative, Inc., Hoolehua, HI - Assist in formulating an equity redemption policy.

21.) Hawaii Organic Produce Association, Pahoa, HI - Assist in forming a cooperative to market organically grown sweet pineapple.

22.) Tuscarora Organic Growers, Hustontown, PA - Assist in forming a vegetable marketing cooperative.

23.) Southwest West Virginia Vegetable Cooperative, Ripley, WV - Assist in establishing a mixed vegetable packing and marketing cooperative.

24.) North Carolina Sweet Potato Marketing Cooperative, Benson, NC - Advise in establishing bylaws and developing marketing plan.

25.) Stonington Lobster Cooperative, Stonington, ME - Review and evaluate financial performance.

26.) Time and Tide RC&D, Waloboro, ME - Assist in forming a cooperative to purchase barley.

27.) Big Island Dairy Farmers Cooperative, Hilo, HI - Assist in developing a producer marketing agreement.

28.) Kentucky Farmers First, Ewing, KY - Assist in developing a multi-product marketing cooperative.

29.) Farmers Market Artists, Fayetteville, NC - Evaluate the potential for forming a cooperative.

30.) Tenn-Tom Fruit and Vegetable Growers Association, Booneville, MS - Assist with record keeping, board training, bylaw review, and organizational restructuring.

31.) Sea Ranch, Grant, FL - Evaluate the feasibility of forming a cooperative to market clams.

32.) Sun River Electric Cooperative, Inc., Fairfield, MT - Assist in forming a health service cooperative to serve rural areas.

33.) Port-A-Pig Marketers, Napoleon, OH - Develop a plan to transport and market members' hogs.

34.) Farmers Union Co-op Gin, Eakly, OK - Study the feasibility of a new or expanded marketing activity.

35.) Minnesota Inland Commercial Fisherman's Association, Browns Valley, MN - Conduct a market survey of non-traditional fish products.

36.) Central Arkansas Vegetable Growers Cooperative, North Little Rock, AR - Evaluate the feasibility of forming vegetable packing and marketing cooperative.

37.) Willingham Rabbit Farm, Butler, GA - Investigate the feasibility of establishing a rabbit processing plant.

38.) Nebraska Farm Bureau Federation, Lincoln, NE - Survey producer and feeder concerns about packer mergers, integration, market access.

39.) Land O'Lakes, Inc., Minneapolis, MN - Compare costs of manufactured dairy products to other cooperatives.

40.) Atlantic Dairy Cooperative, Southampton, PA - Compare dairy product manufacturing _costs to Agricultural Cooperative Service/National Milk Producers Federation results.

41.) Agri-Mark, Inc., Lawrence, MA - Compare dairy product manufacturing costs to Agricultural Cooperative Service/National Milk Producers Federation results.

42.) Associated Milk Producers, Inc., San Antonio, TX - Compare dairy product manufacturing costs to Agricultural Cooperative Service/National Milk Producers Federation results.

43.) East Central/Select Sires - MABC-Select Sires, Waupun, WI - Conduct an economic analysis of the feasibility of consolidating operations.

44.) Southern States Cooperative, Inc., Richmond, VA - Investigate the possibility of conducting a comparison of country elevator operating costs.

45.) Eleven Dairy Cooperatives, Washington, DC - Dairy manufacturing cost study. (1988)

46.) Lake to Lake Division of Land O'Lakes, Inc., Manitowoc, WI - Assist in identifying alternatives for converting current capitalization/pooling structure.

47.) Cabot Farmers' Cooperative Creamery, Co., Inc., Cabot, VT - Assist in developing ways to improve the efficiency and organization of existing operations.

48.) CENTROL, Twin Valley, MN - Assist in examining organizational, staffing, and compensation issues.

49.) National Council of Farmer Cooperatives, Washington, DC - Survey and analyze cooperative petroleum operations.

50.) North Dakota Association of Cooperatives, Bismarck, ND - Assist in examining current structure and operations and planning for the future.

51.) Land O'Lakes, Inc., Minneapolis, MN - Examine financial performance in relation to industry standards.

52.) Empire Livestock Marketing Cooperative, Ithaca, NY - Study the feasibility of relocating and building two livestock auction markets.

53.) Southwest Grain Cooperative, Gladstone, ND - Examine current operations and identify strategic options.

54.) Mississippi Catfish Farmers Marketing Association, Jackson, MS - Assist in identifying alternatives to improve grower returns.

55.) Lake to Lake Division of Land O'Lakes, Inc., Kiel, WI - Assist in reviewing and editing a historical review of the cooperative.

56.) MFA Livestock Association, Inc., Marshall, MO - Research pricing mechanisms for feeder pigs and diversification possibilities for livestock cooperatives.

BIOTECHNOLOGY

Mr. WHITTEN. As a result of a conference on biotechnology and cooperatives held in 1988, 400 copies of the proceedings were requested and sent to various cooperative leaders, agricultural biotechnology experts, and researchers. Are there any new cooperatives that participate in biotechnology and product development as a result of this conference?

Dr. TORGERSON. The purpose of the meeting was to sensitize cooperative leadership to the emerging issues associated with developments and potential developments in agricultural biotechnology. The focus was in developing appropriate strategies for effectively serving farmers in a climate of new products, techniques, and an altered competitive structure in the marketplace.

Most cooperatives today, as at the time of the conference, are not active participants in the development of new products or technologies associated with biotechnological research. Generally speaking, cooperatives lack the resource base and expertise to make a serious research and development effort in this area. Cooperatives see their emerging role in biotechnology as one of interface between farmers and the manufacturers of new products as they are made available. This role will concentrate on supplying new products and the extensive information requirements for their use. To this end, many cooperatives are attempting to prepare for this role through internal education and the nurturing of business relationships with firms involved in active biotechnology research.

There are few exceptions to this. Land O' Lakes is involved in genetic engineering and embryo transfers. 21st Century Genetics has an animal biotechnology research program. Several dairy cooperatives have long been involved in culturing and food processing biotechnologies. Other cooperatives have formed partnerships or joint ventures with organizations operating active programs of biotechnological research. Goldkist, Growmark, and Agway each have established some form of business or contractual relationship that will enable them to participate, in some way, in the findings of biotechnology research.

Other cooperatives, including FFR Cooperative, and several artificial insemination cooperatives continued to be involved in the more traditional genetics-based breeding research.

PUBLICATIONS

Mr. WHITTEN. Your agency maintains an inventory of more than 100 research and educational publications. Do you coordinate your inventory with the National Agricultural Library?

Dr. TORGERSON. We provide notification copies of all publications to the National Agricultural Library—NAL—through the Department's distribution system. Additionally, NAL should be getting copies as a depository library through the Government Printing Office.

Mr. WHITTEN. How many subscribers do you have for the monthly magazine, "Farmer Cooperatives"? What is the cost to the agency for production of this magazine?

Dr. TORGERSON. As of March 21, 1990, we had 776 paid subscribers for 870 copies of our magazine, "Farmer Cooperatives." Additionally, we distribute 5,411 copies at no cost in support of our Agency programs.

Allocated costs such as labor, production, and distribution, for the magazine in FY 1989 were $189,900.

Mr. WHITTEN. Please submit for the record the most recent catalog of farm cooperative publications, "Cooperative Information Report."

Dr. TORGERSON. I will be happy to provide a copy of "Farmer Cooperative Publications," Cooperative Information Report 4.

[CLERK'S NOTE.—The "Farmer Cooperative Publications" is too voluminous to print as part of the record and is maintained in Committee files.]

Mr. WHITTEN. How many copies of this publication are printed and what is the cost?

Dr. TORGERSON. In FY 1989, we printed 7,280 copies at a cost of $2,293.

Mr. WHITTEN. Of the 10,000 copies of this publication that were printed in 1988, how many were actually sent out or used?

Dr. TORGERSON. The entire amount were sent out or used by January of 1989.

Mr. WHITTEN. How much did you receive in receipts for magazine and other publications during fiscal year 1989?

Dr. TORGERSON. Total receipts were $15,017.

COOPERATIVE STUDY

Mr. WHITTEN. A study was recently done by your agency which concluded that one of the most promising areas for future research is how cooperatives can counterbalance increasing concentration in several segments of the agricultural economy. Please elaborate on this finding.

Dr. TORGERSON. One of the earliest, and most significant, reasons for the organization of cooperatives in the United States was to provide farmers with a way of amassing enough economic strength to successfully negotiate with local monopolies in the product markets. While this situation was common in many commodities, perhaps the best examples were the local monopolies of rail company-owned grain elevators in the second half of the 19th century and the tobacco buying trust of the early 20th century. By banding together to form marketing cooperatives, farmers could control a large enough volume to increase their selling options and obtain more equitable terms of trade.

The 1980's have seen a rapid concentration and growth of vertically integration in several agricultural commodities and related industries. which give rise to the potential exploitation of market power to the detriment of farmers. When this occurs, the options farmers have for selling and/or buying decrease and the quality and meaning of market price and other information declines.

In several commodity areas, the level of cooperative organization is clearly not to a point where maintenance of a negotiating balance between farmers and their suppliers can be assured. The growth in concentration livestock slaughtering and growth in contract feeding is rapidly destroying the economic future for the independent animal producer. Similar trends in poultry production are even further along. Concentration among grain exporters has increased, and with it a greater degree of local buying markets by the remaining firms. Seed research and production is being quickly swallowed up by large chemical and pharmaceutical firms positioning themselves to profit from future developments of biotechnology research.

Farmers do have several options for using cooperative business strategies to ensure their continued independence and economic viability in the face of these market structure developments. Given adequate resources, ACS research will examine these alternative strategies and assist farmers and their cooperatives in determining the most effective ways to maintain healthy, functioning markets and market institutions.

FINANCIAL PROFILE

Mr. WHITTEN. What is the range and sales of the largest 100 cooperatives?

Dr. TORGERSON. Individual cooperative sales among the 100 largest farm cooperatives ranged from $65.4 million to $2.9 billion for the business year ending in 1988, the most recent year for which complete information is available. Total sales in 1988 for the largest 100 cooperatives were $46.7 billion.

Mr. WHITTEN. Provide for the record a table comparing the range and sales of the 100 largest farm cooperatives for fiscal years 1984 through 1989.

[The information follows:]

TOTAL SALES AND RANGE FOR 100 LARGEST FARMER COOPERATIVES, 1984–89 [1]

[In millions of dollars]

	Low	High	Total sales
Year:			
1984	61.6	5,295.5	53,157
1985	53.5	4,078.1	47,157
1986	54.1	3,540.3	42,592
1987	46.3	3,264.7	43,085
1988	65.4	2,913.8	46,658
1989	76.6	3,246.8	N/A

[1] Sales include marketing sales, farm supply sales, and other income

COOPERATIVES ESTABLISHED IN 1989

Mr. WHITTEN. How many cooperatives did you help establish in fiscal year 1989? Please list by name, location, and farm product.

Dr. TORGERSON. We were involved in helping start 9 cooperatives that actually incorporated during the 1989 fiscal year.

[The information follows:]

1. Eastern North Carolina Potato Growers Cooperative, Elizabeth City, NC—White potato marketing.
2. Empire Fruit Growers Cooperative, Inc., Wolcott, NY—Apple packing and marketing.
3. Little Darlin' Sweet Potato Cooperative, Fasion, NC—Fresh sweet potato packing and marketing.
4. Milakai Graziers Association, Kaunakakai, HI—Livestock slaughtering and marketing.

5. Muskingum Valley Christmas Tree Growers, Adamsville, OH—Christmas tree marketing.
6. North Carolina Oil Seed Cooperative, Angier, NC—Primrose seed marketing.
7. North Carolina Sweet Potato Marketing Cooperative, Benson, NC—Sweet potato bargaining.
8. Northeast Produce Cooperative, Inc., Camden, NC—White potato bargaining.
9. Sleeping Bear Cherry Marketing Cooperative, Traverse City, MI—Fresh cherry marketing.

Mr. **Whitten**. For the record provide a ten-year table showing the number of cooperatives established each year.

[The information follows:]

Cooperatives Incorporated with ACS Assistance, Fiscal Year 1980-Fiscal Year 1989

Fiscal year:	*Number incorporated*
1989	9
1988	7
1987	6
1986	8
1985	1
1984	7
1983	3
1982	3
1981	3
1980	4

COOPERATIVES' LOSSES

Mr. **Whitten**. Please provide a ten-year table showing the number of cooperatives that went out of business for each fiscal year through 1989.

Dr. **Torgerson**. I will provide for the record, a table showing the number of cooperatives that ACS has dropped from its list of cooperatives for 1979–88. Data for 1989 are not yet available.

[The information follows:]

NUMBER OF COOPERATIVES DROPPED FROM ACS'S LIST OF COOPERATIVES, 1979–88 [1]

Year	Number dropped	Year	Number dropped
1979	257	1984	217
1980	203	1985	218
1981	205	1986	280
1982	229	[2] 1987	280
1983	214	1988	189

[1] Includes cooperatives that discontinued operations, merged or consolidated with other organizations, were acquired by other cooperatives or noncooperatives, became inactive, or no longer operated as a farmer cooperative.

[2] Revised.

COOPERATIVES BY STATE

Mr. **Whitten**. Please provide for the record a table showing by State the number of cooperatives and the combined sales volume and the cooperatives share of total farm products marketed.

Dr. **Torgerson**. I will provide a table showing the number of cooperatives headquartered in and combined sales volume by State for 1987. We did not collect data by State for 1988.

[The information follows:]

NUMBER OF COOPERATIVES HEADQUARTERED IN STATE AND COMBINED SALES VOLUME OF COOPERATIVES OPERATING IN STATE, 1987 [1]

State	Number	Sales (millions)
Alabama	77	652.7
Arizona	14	510.6
Arkansas	94	1,134.5
California	209	6,879.7
Colorado	70	620.3
Connecticut	5	172.1
Delaware	5	83.3
Florida	53	1,608.4
Hawaii	29	89.1
Idaho	55	569.2
Illinois	261	3,172.0
Indiana	71	1,413.8
Iowa	322	4,913.8
Kansas	218	1,880.6
Kentucky	76	714.5
Louisiana	64	505.1
Maine	7	155.9
Maryland	21	403.7
Massachusetts	12	504.9
Michigan	88	1,545.6
Minnesota	519	4,373.0
Mississippi	131	757.7
Missouri	91	1,738.6
Montana	109	307.1
Nebraska	210	1,964.9
New Jersey	18	300.3
New Mexico	13	42.3
New York	170	2,109.4
North Carolina	31	566.5
North Dakota	371	1,899.3
Ohio	134	2,216.4
Oklahoma	135	818.9
Oregon	51	860.0
Pennsylvania	76	1,679.9
South Carolina	13	177.0
South Dakota	215	921.7
Tennessee	95	619.2
Texas	346	2,119.0
Utah	32	315.5
Vermont	10	354.4
Virginia	97	841.6
Washington	108	1,497.6
West Virginia	43	128.3
Wisconsin	300	4,511.1
Wyoming	18	51.4
Other States [2]	22	1,092.7
Foreign [3]		524.2
Total [4]	5,109	60,317.7

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[1] Data by State were not collected for 1988 and data for 1989 are not yet available.

[2] Information for these States were grouped to avoid disclosure. States included are Alaska, Georgia, Nevada, New Hampshire, and Rhode Island.

[3] Includes value of farm products imported, farm supplies exported, services related to imported farm products or exported farm supplies, sales to domestic military installations, or sales of farm products not received directly from member-patrons.

[4] In 1988, cooperatives' share of total farm products marketed at the first handler level was 25 percent.

COOPERATIVES' MARKET SHARE

Mr. WHITTEN. Please update the table in the 1990 hearing record showing the cooperatives share of farm products marketed in the years 1974, 1979, 1982, and 1984 through 1988.

Dr. TORGERSON. I will provide a table showing cooperatives' share of farm products marketed for the years 1974, 1979, 1982, and 1984 through 1988.

[The information follows:]

COOPERATIVES' SHARE OF FARM PRODUCTS MARKETED [1]

	All farm products	Milk	Livestock	Poultry	Cotton	Fruits and vegetables	Grains [2]
Year:							
1974	26	70	11	9	25	22	41
1979	28	68	11	9	28	25	41
1982	30	77	11	7	36	20	36
1984	30	78	8	8	35	17	38
1985	27	78	8	8	33	16	33
1986	26	78	8	([3])	35	18	27
1987	25	76	7	([3])	38	23	29
1988	25	76	7	([3])	41	24	30

[1] Share estimates are made at the first-handler level. Shares for 1974 are based on data for cooperative fiscal years ending between July 1, 1973, and June 30, 1974. Shares for the other years are based on calendar year data.

[2] Shares for 1974 and 1979 includes grain sales from sources outside the cooperative system.

[3] Poultry share estimates were not reported after 1985. Because of its integrated nature, the poultry industry does not have an easily definable first-handler stage at which cooperative share can be measured.

NET SALES AND PROFITS

Mr. WHITTEN. Please update for the record last year's table showing the combined farm income, sales, net margins, assets, and return on assets for cooperatives to include fiscal year 1988.

Dr. TORGERSON. I will submit for the record, a table showing the net farm income, sales, net margins, assets, and return on assets for cooperatives for 1981–1988.

[The information follows:]

U.S. FARMER COOPERATIVES [1]

	Net farm income [2] (billions)	Farmer cooperatives			
		Sales [3] (millions)	Net margins (millions)	Assets (millions)	Return on assets [4] (percent)
Year:					
1981	$26.9	$71,534	$1,440	$28,840	5.0
1982	23.5	69,150	854	28,553	3.0
1983	12.7	66,755	1,055	28,810	3.7
1984	32.2	73,047	1,009	29,182	3.5
1985	32.4	65,601	775	27,779	2.8
1986	38.0	58,395	688	26,496	2.6
1987	47.1	60,318	1,486	27,643	5.4
1988	45.7	66,430	1,680	29,286	5.7

[1] Data are based on a calendar year.

[2] Source: Economic Indicators of the Farm Sector: National Financial Summary, 1988. Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture. ECIFS 8–1 p. 7.

[3] Excludes intercooperative business.

[4] Includes cooperatives that operate on both a pooling and net margins basis. Shows relative changes from year-to-year and not actual return on assets.

TREND OF COOPERATIVES

Mr. WHITTEN. Please provide a ten-year table showing the trend in number of organizations and annual membership for farmer cooperatives.

[The information follows:]

FARMER COOPERATIVES AND MEMBERSHIPS, 1979–88

	Cooperatives (number)	Memberships (thousands)
Year:		
1979	6,445	5,627
1980	6,293	5,379
1981	6,211	5,335
1982	6,125	5,136
1983	5,989	4,955
1984	5,782	4,842
1985	5,625	4,781
1986	5,369	4,600
1987	5,109	4,440
1988	4,937	4,195

COOPERATIVE RESEARCH

Mr. WHITTEN. What research projects do you propose to initiate in fiscal year 1991?

Dr. TORGERSON. Projects under consideration include the future role of cooperatives in meatpacking; economic analysis of equitable treatment of cooperative members; factors affecting manufacturing costs at dairy cooperative plants; cooperative strategy in international business arrangements; cooperative computer services; cooperative marketing of branded fresh produce; cooperative ownership and transfers of ownership over time; and leadership identification through member participation.

ACS CONTRACTS AND AGREEMENTS

Mr. WHITTEN. Please provide for the record a list of existing contracts and contracts proposed for fiscal year 1991, by contracting entity.

Dr. TORGERSON. We will provide the information for the record.

[The information follows:]

EXISTING CONTRACTS AND AGREEMENTS

Virginia Polytechnic Institute and State University.—Development of planning guides for fresh vegetable marketing facilities.

Prairie View A&M University.—Feasibility of establishing a milk marketing cooperative for dairy goats in the upper coast of Texas.

University of Florida.—Factors affecting over-order payments in Federal milk marketing orders.

Oklahoma State University.—Marketing alternatives for fed and feeder cattle producers.

Washington State University.—Examine cooperative export alternatives for apples.

University of Wisconsin.—Examine vertical organization and economic performance in grain cooperatives.

North Dakota State University.—Study of grain marketing strategies by cooperatives to accommodate changes in farm programs.

University of California.—Historical development of West Coast cooperatives.

University of Missouri.—The future of local farm supply/grain marketing cooperatives in the Corn Belt.

Michigan State University.—Performance of economic coordination functions by farmer cooperatives.

University of Nebraska.—Development of a Lotus 1-2-3 application for teaching the fundamentals of cooperative financial budgeting and cash flow.

Oregon State University.—Supply cooperatives: service alternatives for serving large and small farms.

Virginia Polytechnic Institute and State University.—Development of a farm supply cooperative trade area decision-making aid.

Oklahoma State University.—Implementation of CoopSim, a decision support system in agricultural cooperatives.

Iowa State University.—Strategies for cooperative capitalization.

University of Minnesota.—Mergers between farm supply cooperatives.

Cornell University.—Decision-making in agricultural cooperatives.

Texas A & M University.—Economic impact of emerging rural agribusiness centers on cooperatives.

California State University-Fresno.—Cooperatives in California agriculture.

Virginia Polytechnic Institute and State University.—Cooperative niche marketing of sheep and lambs.

University of Missouri.—Cooperative models for hog integration.

University of Connecticut.—Assessment of competitive strategies for cooperatives.

PROPOSED CONTRACTS AND AGREEMENTS FOR 1990

Animal and Plant Health Inspection Service.—Administrative Services.

Washington Computer Center.—Data Processing Service.

Cooperative State Research Service.—(1) For Support of FY-90 Current Research Information Systems and (2) USDA Small Business Innovation Research Program.

National Agricultural Statistics Service.—Processing Data for the 1990 Statistical Survey.

PROPOSED CONTRACTS AND AGREEMENTS FOR 1991

Animal and Plant Health Inspection Service.—Administrative Services.

Washington Computer Center.—Data Processing Service.

Cooperative State Research Service.—(1) For Support of FY 91 Current Research Information Systems, (2) USDA Small Business Innovation Research Program.

Mr. **AKAKA**. Mrs. Smith?

RURAL DEVELOPMENT

Mrs. **SMITH**. Administrator Torgerson, in your statement you briefly mention a study done by the agency entitled "Cooperatives and Rural Development." Would you briefly explain to the committee the findings of your study?

Dr. **TORGERSON**. The report examines the needs of rural America, and the way cooperatives have helped meet those needs. It also explores the way cooperatives might further help in rural development. The major conclusion is that the cooperative is an extremely valid model with numerous applications to rural development efforts. Cooperatives, as a self-help development tool, have the advantages of great flexibility and adaptability to problems and circumstances.

Established by local interest and local need, and organized along cooperative and general business principles, they are designed for stability and continued service. We found that while cooperatives are not the answer to all rural development problems, they can be an answer to some of them, but only if their potential is recognized and their advantages fully used.

Mrs. SMITH. Would further involvement by the ACS in rural programs assist in rural development across the Nation? Are any of these recommendations being pursued administratively?

Dr. TORGERSON. We feel very strongly that agricultural cooperatives have contributed much to rural development. Since we are involved in helping develop new cooperatives as well as making existing cooperatives stronger we feel that the ACS is currently assisting rural development across the Nation. Our programs of education, research, and technical assistance are what appear to be needed to help develop strong cooperatives in rural America and contribute to rural development. Particularly, our field offices are effective in providing timely, on-going, and intensive technical advice to developing groups. We are trying to let as many people know as possible that cooperatives are an important tool in rural development and should not be overlooked. With our limited staff and budget we are trying to leverage our expertise by coordinating with and using the resources of the Extension Service and the RC&D program of the Soil Conservation Service.

STATE OF U.S. FARM COOPERATIVES

Mrs. SMITH. In your statement, you say that cooperative business volume rose 10.1 percent in 1988 to $66.4 billion. This is a significant improvement compared to previous years.

Would you briefly explain the reasons for the improvement in cooperative business. Is it due to improving financial conditions across rural America?

Dr. TORGERSON. The improvement in cooperative business in 1988 was due to several factors. Because of the agricultural depression in the early 1980s, cooperatives like many other firms have been forced to make some major adjustments. This included reducing number of employees, selling off assets, and reducing other operating and nonoperating costs. These adjustments along with improvements in the financial condition of agriculture across rural America have helped cooperatives to improve their operations. The higher business volume in 1988 was attributed primarily to increased prices for grains, oil-bearing crops, and feed resulting from the drought and lower production in 1988. Production of feed grains and soybeans was down significantly.

Mrs. SMITH. Thank you for your answers.

Mr. AKAKA. Again, thank you for being so patient and thank you for your testimony, too.

Dr. TORGERSON. Thank you.

Mr. AKAKA. The committee stands adjourned.

RANDALL TORGERSON

Biographical Sketch

Dr. Randall E. Torgerson, a cooperative educator and agricultural economist, has served as head of cooperative research and technical assistance activities in the U.S. Department of Agriculture since October 1975. He is Administrator of Agricultural Cooperative Service. In 1982, he received the Department's highest performance recognition, the Distinguished Service Award.

As ACS Administrator, USDA, Dr. Torgerson directs the research and technical assistance efforts of 45 agricultural economists and cooperative specialists. USDA cooperative programs are designed to help farmers and other rural people broaden their use of cooperatives and to help increase the efficiency of the nation's 5,985 farmer-owned cooperatives. These cooperatives are involved in the production and marketing of the nation's food and fiber, and have a combined annual net business volume in excess of $66.7 billion.

Dr. Torgerson initially came to USDA in 1974 as a staff economist to the Administrator of USDA's Agricultural Marketing Service. He had been an associate professor at the University of Missouri-Columbia. He taught cooperative business organizations, management programs of cooperative firms, and economics of collective action in agriculture. He helped organize the Missouri Institute of Cooperatives and served as executive secretary during 1969-73. He also served as executive secretary of the Graduate Institute of Cooperative Leadership, University of Missouri, 1971-74.

Alpha Gamma Rho, a professional-social fraternity of students majoring in agriculture, which selects its national officers from alumni, elected Torgerson as Grand President for the 1976-77 year.

Dr. Torgerson, native of Wisconsin, earned a bachelor degree from the University of Minnesota and master's and doctor's degrees from the University of Wisconsin, all in agricultural economics. He attended the Swedish Center for Cooperative Development in 1962-63 and was a Fulbright Graduate Fellow at the Agricultural College of Norway in 1965-66. In the fall of 1978, he was an Eisenhower Fellowship Exchange participant to the European Economic Community (EEC).

Dr. Torgerson is a frequent writer for various periodicals and has written two books related to farmer cooperatives. His book, "Producer Power at the Bargaining Table: A Case Study of Legislative Life of S. 109." was winner of the 1970 Curators' Publication Award at the University of Missouri. He also authored "Farm Bargaining," a description of farmer activity in Norway and Sweden.

He is married to the former Susan Grace Grundahl. They have two sons, Knut Everett and Rolf Eric.

September 1984. For further information, call (202) 447-8870.

AGRICULTURAL COOPERATIVE SERVICE

Statement of Randall E. Torgerson, Administrator before the Subcommittee on Rural Development, Agriculture, and Related Agencies.

Mr. Chairman and Members of the Committee, I appreciate the opportunity of appearing before you to present the budget of the Agricultural Cooperative Service. First, I would like to introduce my associates, James E. Haskell, Deputy Administrator, Agricultural Cooperative Service; and Michael C. Gregoire, Acting Director of the Budget and Accounting Division, Animal and Plant Health Inspection Service.

Agency Missions

The Agricultural Cooperative Service (ACS) serves as the Department's focal point in providing research, technical assistance and education to farmer-owned cooperatives throughout the United States. ACS is a separate Agency to which the Secretary of Agriculture has delegated responsibilities of carrying out the functions directed by Congress in the Cooperative Marketing Act of 1926. The Agency provides a program of cooperative research, technical assistance, and education to bring about more efficient and effective cooperative operations in support of family farm agriculture and rural communities. ACS also serves as the focal point for the collection and dissemination of statistics on farmer cooperatives and analysis of policy issues affecting farmer cooperatives.

Farmer Cooperatives Continue to Recover

Farmer cooperatives continue to progress in their adjustment to the significant changes occurring in agriculture and the impacts on the family farm. Cooperative business volume rose 10.1 percent in 1988 to $66.4 billion. Total net income for all cooperatives was $1.7 billion. The number of organizations (4,937) and overall membership (4.20 million) both attest to continued restructuring in the industries serving production agriculture. This adjustment process includes cooperatives going out of business, and consolidations, as farm operators adapt their organizations to changing times. Most cooperatives by reducing employment and disposing of unneeded and inefficient facilities now appear to be in stronger financial condition than in the mid-1980's when they were experiencing traumatic operating conditions.

Research, Technical Assistance and Education

The Agricultural Cooperative Service completed research in a number of areas last year to help cooperatives better adjust to changing industry conditions. These included studies on financial profile of farmer cooperatives, operations of dairy cooperatives, agricultural cooperative theory, the role of cooperatives in rural development, value-added export potential to Pacific Rim countries, alternative methods of financing cooperatives, and major farm characteristics and cooperative use. ACS was involved in 97 formal technical assistance projects in 1989, involving 119 cooperatives. A number of these involved marketing operations, cost analysis, merger studies, and marketing alternatives to traditional row crops. They were as varied as looking at catfish growers' organizational problems to developing new Christmas tree marketing cooperatives. Fifty-one projects involved emerging and developing cooperatives and producer groups representing more than 3,000 members.

The Agency plays an important role in providing education on cooperatives to both domestic clientele and foreign visitors. ACS educational publications are widely used, and our monthly magazine is viewed as a primary source of information for improved cooperative operations. We are conducting an increasing number of director and manager workshops for emerging cooperatives, and hosted 163 foreign visitors from 18 countries in 1989, briefing them on Department functions and policies, as well as aspects as U.S. farmer cooperatives.

Expanded Rural Development Effort

Congress charged the Agency in its budget report for FY 1989 to examine the role of cooperatives in rural development. The request was as follows:

> "The committee will expect the Agricultural Cooperative Service to undertake a study of the potential for cooperatives to expand their role in rural development through the provision of services, financing, and economic development to improve the quality of life in rural America."

This study entitled "Cooperatives and Rural Development" was completed and delivered to Congress this past November. It is our hope it will provide a foundation for rural cooperatives to increase their already significant role in improving economic conditions in many rural areas.

Budget Request

The FY 1991 budget for the Agricultural Cooperative Service is $4,764,000, with a staff year ceiling of 69. Our FY 1991 budget proposes a $50,000 increase over the current 1990 estimate for increased pay costs.

To continue to serve farmer cooperatives within a stable budget in inflationary times, several adjustments are being made. Only the highest priority research projects having the greatest applicability to cooperatives as a whole are being undertaken. The Agency will continue its technical assistance program to existing cooperatives and our cooperative development activities including field operations in Hawaii, Ohio, and North Carolina.

Mr. Chairman, I thank you for the opportunity to present this statement. We will be glad to respond to any questions.

AGRICULTURAL COOPERATIVE SERVICE

Purpose Statement

The Agricultural Cooperative Service (ACS) is assigned functions under both the Cooperative Marketing Act of 1926 and under the Agricultural Marketing Act of 1946. Under the Cooperative Marketing Act, ACS is authorized to: (1) acquire, analyze, and disseminate economic, statistical, and historical information regarding the progress, organization, and business methods of cooperative associations in the United States and foreign countries; (2) conduct studies of economic, legal, financial, social, and other phases of cooperation, including analyses of cooperative associations; (3) make surveys and analyses of the accounts and business practices of representative cooperative associations; (4) confer and advise with committees or groups of producers who want to form a cooperative association and to make an economic analysis of the facts relevant to setting up such an association; (5) promote the knowledge of cooperative principles and practices and to cooperate in promoting such knowledge to others; and (6) make special studies to acquire and disseminate such information.

Under the Agricultural Marketing Act, ACS is authorized to carry out responsibilities which relate to the marketing aspects of cooperatives, including economic research and analysis and the application of economic research findings. In addition, ACS is authorized to work with institutions and international organizations on subjects relating to cooperatives.

ACS serves as the focal point of national activity involving agricultural cooperatives. The purpose of ACS is to help farmers help themselves by providing the assistance necessary to support and improve existing cooperatives and to help farmers organize new cooperatives.

The studies conducted by ACS, alone or in conjunction with other Federal or State institutions, are intended to provide farmers with information on economic, financial, organizational, legal, and social aspects of cooperative activity. In today's rapidly changing economic environment, ACS provides technical advice to assist farmer cooperatives in the development and operation of viable profitable organizations serving the nation's family farmers.

ACS is headquartered in Washington, DC, with 3 field offices which are in Hilo, Hawaii; Columbus, Ohio; and Greenville, North Carolina. As of September 30, 1989, ACS employed 61 permanent full-time and 2 permanent part-time employees; 61 of whom were located in headquarters and 2 in the field offices. At the present time, one field office position is vacant.

AGRICULTURAL COOPERATIVE SERVICE

Available Funds and Staff-Years

1989 Actual and Estimated, 1990 and 1991

ITEM	1989 Actual		1990 Estimated		1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
Agricultural Cooperative Service	$4,655,000	65	$4,714,000	69	$4,764,000	69

Full-time Equivalent Staff-Years:	1989 Actual	1990 Estimated	1991 Estimated
Ceiling	65	69	69
Non-Ceiling	4	4	4
Total	69	73	73

AGRICULTURAL COOPERATIVE SERVICE

Permanent Positions by Grade and Staff-Year Summary

1989 and Estimated 1990 and 1991

GRADE	1989			1990			1991		
	Headquarters	Field	Total	Headquarters	Field	Total	Headquarters	Field	Total
ES-5	1	--	1	1	--	1	1	--	1
GS/GM-15	4	--	4	5	--	5	5	--	5
GS/GM-14	13	--	13	14	--	14	14	--	14
GS/GM-13	14	2	16	17	2	19	17	2	19
GS-12	6	--	6	5	1	6	5	1	6
GS-11	8	--	8	8	--	8	8	--	8
GS-9	2	--	2	4	--	4	4	--	4
GS-7	7	--	7	7	--	7	7	--	7
GS-6	3	--	3	3	--	3	3	--	3
GS-5	--	--	--	--	--	--	--	--	--
Other Graded Positions....	--	--	--	1	--	1	1	--	1
Ungraded Positions........	1	--	1	1	--	1	1	--	1
Total Permanent Positions.	59	2	61	66	3	69	66	3	69
Staff-Years:									
Ceiling.................	63	2	65	66	3	69	66	3	69
Non-Ceiling.............	4	--	4	4	--	4	4	--	4
TOTAL................	67	2	69	70	3	73	70	3	73

AGRICULTURAL COOPERATIVE SERVICE

CLASSIFICATION BY OBJECTS

1989 and Estimated 1990 and 1991

		1989	1990	1991
Personnel Compensation:				
	Headquarters	$2,674,169	$2,789,000	$2,899,000
	Field	97,738	101,000	106,000
11	Total personnel compensation	2,771,907	2,890,000	3,005,000
12	Personnel benefits	452,288	471,000	506,000
13	Benefits for former personnel	3,658	3,000	3,000
	Total personnel compensation and benefits	3,227,853	3,364,000	3,514,000
Other Objects:				
21	Travel	186,111	190,000	190,000
22	Transportation of things	1,972	2,000	0
23.2	Rental payments to others	3,015	1,000	1,000
23.3	Communications, utilities, and miscellaneous charges	202,130	208,000	203,000
24	Printing and reproduction	83,559	85,000	85,000
25	Other services	740,135	756,000	672,000
26	Supplies and material	37,651	39,000	39,000
31	Equipment	66,946	69,000	60,000
	Total other objects	1,321,519	1,350,000	1,250,000
	Total direct obligations	4,549,372	4,714,000	4,764,000

Position Data:

	1989	1990	1991
Average Salary, ES positions	$78,600	$81,400	$101,000
Average Salary, GM/GS positions	$41,616	$43,114	$45,391
Average Grade, GM/GS positions	11.78	11.83	11.83

AGRICULTURAL COOPERATIVE SERVICE

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Salaries and Expenses

For necessary expenses to carry out the Cooperative Marketing Act of July 2, 1926 (7 U.S.C. 451-457), and for activities relating to the marketing aspects of cooperatives, including economic research and analysis and the application of economic research findings, as authorized by the Agricultural Marketing Act of 1946 (7 U.S.C. 1621-1627), and for activities with institutions or organizations throughout the world concerning the development and operation of agricultural cooperatives (7 U.S.C. 3291), [$4,714,000] $4,764,000; of which $99,000 shall be available for a field office in Hawaii: Provided, That this appropriation shall be available for employment pursuant to the second sentence of section 706(a) of the Organic Act of 1944 (7 U.S.C. 2225), and not to exceed $15,000 shall be available for employment under 5 U.S.C. 3109.

SALARIES AND EXPENSES

Appropriation Act, 1990	$4,714,000
Budget Estimate, 1991	4,764,000
Increase in Appropriation	+50,000

SUMMARY OF INCREASES
(On basis of appropriation)

Item of Change	1990 Estimated	Pay Costs	Program Changes	1991 Estimated
Research on agricultural cooperatives	$2,779,000	+$32,000	--	$2,811,000
Technical assistance to agricultural cooperatives.	1,935,000	+18,000	--	1,953,000
Total Available	4,714,000	+50,000	--	4,764,000

PROJECT STATEMENT
(On basis of appropriation)

PROJECT	1989 Actual		1990 Estimated		Increase or Decrease	1991 Estimated	
	Amount	Staff-Years	Amount	Staff-Years		Amount	Staff-Years
1. Research on agricultural cooperatives	$2,820,610	38	$2,779,000	41	+$32,000	$2,811,000	41
2. Technical assistance to agricultural cooperatives	1,728,761	27	1,935,000	28	+18,000	1,953,000	28
Unobligated balance	105,629	--	--	--	--	--	--
Total Appropriation	4,655,000	65	4,714,000	69	+50,000(1)	$4,764,000	69

EXPLANATION OF PROGRAM

The Agricultural Cooperative Service (ACS) serves as the national focal point and storehouse for information about farmer cooperatives. The major missions of the agency include research on cooperative problems and issues, providing technical assistance and advice to existing and newly emerging cooperative associations, collection and dissemination of cooperative statistics, and preparation and distribution of educational materials on cooperatives.

The Agency's research program includes studies of economic, financial, organizational, managerial, legal, social and policy related issues that affect cooperatives. Studies may be specific to a single commodity or group of commodities or may focus on specific functions which cut across commodity and service lines for cooperatives that market farm products, purchase production supplies, or perform related services.

Technical assistance is provided in response to requests, usually from cooperative boards of directors or organizational steering committees who may represent small groups or thousands of farmers. Types of technical assistance provided by ACS include feasibility analysis, merger and other organizational studies, strategic assessment and planning, and review of operations and performance of the range of cooperative activities. Feasibility analysis and organizational and educational assistance are provided for newly emerging cooperatives. ACS provides technical assistance for farmers and their cooperatives in most commodity and functional areas of cooperative operations.

JUSTIFICATION OF INCREASE

(1) An increase of $50,000 for pay costs ($4,714,000 available in 1990).

An increase of $50,000, which represents 50 percent of the 1991 pay raise. The remaining 50 percent of the 1991 pay raise and the total 1990 pay raise is being absorbed.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND STAFF-YEARS
1989 AND ESTIMATED 1990 AND 1991

	1989		1990		1991	
	Amount	Staff-Years	Amount	Staff-Years	Amount	Staff-Years
District of Columbia	$4,398,083	63	$4,517,000	66	$4,564,000	66
Hawaii...............	60,392	1	57,000	1	57,000	1
Kentucky.............	18,779	0	--	--	--	--
North Carolina.......	72,117	1	75,000	1	76,000	1
Ohio.................	0	0	65,000	1	67,000	1
Total...........	4,549,371	65	4,714,000	69	4,764,000	69

AGRICULTURAL COOPERATIVE SERVICE

STATUS OF PROGRAM

Cooperatives allow farmers to join together to achieve goals unattainable on an individual basis. Through cooperatives, farmers jointly process and market farm products, purchase production supplies, and obtain related services.

Current Activities: The Agency is organized along commodity and functional lines into three divisions: Cooperative Marketing Division (CMD), Cooperative Services Division (CSD), and Cooperative Development Division (CDD). This structure is designed to make the most efficient and effective use of resources. Through research and technical assistance, the Agency advises cooperative boards of directors and managers on a range of economic, financial, organizational, legal, and social aspects of cooperatives. The Agency also provides technical assistance to producer groups interested in organizing new cooperatives. These activities are designed to help cooperatives provide more efficient and effective services to their farmer-members in a dynamic economic environment.

The Agency maintains an inventory of more than 100 research and educational publications. In addition, a monthly magazine, Farmer Cooperatives, highlights Agency research and education and serves as a tool for timely communication of significant achievements by cooperatives. The Agency also provides training to directors, managers, and members of developing cooperatives on a variety of cooperative subjects.

Educational materials are prepared by ACS to promote the knowledge of cooperative principles and practices as a self-help means of increasing farm income. Materials covering a wide range of topics are distributed in cooperation with educational institutions, including National and State Extension services, the American Institute of Cooperation, State cooperative councils, National and State farm and youth organizations, State Departments of Agriculture, adult education programs, and others.

ACS is the sole source for national and state statistics on agricultural cooperatives. Data on number of cooperatives, membership, business volume, and financial condition are collected and analyzed to detect changes in structure, operations, and growth trends. The data are used extensively within the Agency in research and technical assistance, in university and business research, and in public policy and private decision making.

All technical assistance studies result from requests for such assistance by cooperatives or from producer groups desiring to form cooperatives. Their value and usefulness is evidenced through their use by boards of directors in making strategic planning and operational decisions. Research is initiated by the agency after considering needs expressed by the cooperative community and internal annual program review that prioritizes potential research directions. This assures that the research is timely, useful, and of utmost importance to cooperative clientele by enabling them to make better business decisions.

Selected Examples of Recent Progress

1. Changes in Financial Profile of Cooperatives Handling Grain.

   This report presents comparative financial information by size and type on local cooperative associations that are first-handlers of grain. These associations had annual sales of at least $5 million, with grain sales representing more than half of total value of sales.

2. Farmer Cooperatives: Members and Use.

This study describes some major characteristics of farmer members of marketing and farm supply cooperatives in 1986 and changes since 1980. The study provides information on number of members and nonmember patrons, and percent of farmers who were members and nonmember patrons and used cooperatives for marketing and purchasing activities. Multiple memberships, inactive members, nonmember nonpatrons, and percent of cooperative usage in marketing and purchasing major farm supplies also are presented.

3. Cooperative Marketing of Animal Health Products.

This report uses eight case studies to identify elements of successful cooperative programs for retailing over-the-counter animal health products. Marketing programs at retail outlets within three types of cooperative structures are analyzed; federated, regional systems, centralized regional systems, and unaffiliated local cooperatives. Extremes in the marketing program of locals included: sales from $19,000 to $625,000, price takers versus price negotiators, onfarm salespersons versus no onfarm salespersons, and price discounters versus full service operations.

4. Export Market Development by Agricultural Commodity Promotion Programs.

This report describes the activities and expenditures for export promotion by State and Federal commodity promotion programs such as marketing orders and checkoff programs in 1986 and estimated 1987. A case study approach is designed to point out some of the complexity and variety of promotion efforts.

5. Nonqualified Notices: An Alternative for Distributing Cooperative Earnings.

This report defines nonqualified written notices of allocation and per-unit retain certificates, illustrates the application of nonqualified notices, and discusses the extent of their use by U.S. farmer cooperatives. A computer cash flow analysis of qualified and nonqualified patronage refund distributions is conducted to identify characteristics of cooperatives and patrons that would benefit from using nonqualified notices. Additional features discussed include, tax management, equity, and accounting considerations, the use of nonqualified notices in federated systems, factors limiting their use, and steps cooperatives should take in initiating their use.

6. Farmer Cooperatives: Commercial Farmer Members and Use.

This study describes some major characteristics of commercial farmer members of marketing and farm supply cooperatives in 1986 and changes since 1980. Seventy-eight percent of commercial farmers were either members or nonmembers of marketing/farm supply cooperatives in 1986 compared with more than 76 percent in 1980. The study focuses on commercial farm operators, 640,000 in 1980 and 593,000 in 1986, who used cooperatives as members or nonmembers patrons.

7. Cooperatives' Position in the Fresh Vegetable Industry.

This report presents an overview of the role of cooperatives in the fresh vegetable industry, examining organization, operations, functions performed, membership served, and problem areas faced by the association and their members. Seventy-three fresh vegetable marketing cooperatives handled a total volume of more than 1.6 billion pounds of 57 different varieties of vegetables with a total value of more than $218 million. Issues of concern to fresh vegetable cooperatives included both foreign and domestic competition, excess supply, labor shortages, high costs, quality control, and marketing and transportation problems.

8. Farmer Cooperative Theory: Recent Developments.

This report describes and evaluates recent theoretical developments in cooperation, outlines remaining areas of conflict and gaps in the theory of agricultural cooperation and discusses topics for future research. The study concludes that one of the most promising areas for future research is how cooperatives can counterbalance increasing concentration in several segments of the agricultural economy.

9. Farmer Cooperative Statistics, 1987.

Gross business and net business volume are reported for 5,109 cooperatives. Business volume, number of cooperatives, and cooperative membership are reported by commodity for those cooperatives classified as marketing, farm supply, and service. Cooperative growth trends show changes in cooperative numbers, memberships, business size, and sales volume. Data on balance sheet and net income and selected activities of other service organizations are reported.

10. How to Capture What Farmers Think.

This report is designed to be a guide for cooperative leaders seeking to determine the needs of members and nonmembers alike. Questionnaire construction is discussed along with confidentiality, nonresponse, missing data, and other factors that play a role in the collection of data. Coding the information for computer input along with the analysis of the data is covered.

11. Directory of Farmer Cooperatives.

The directory contains a State-by-State listing of more than 300 farmer-owned marketing, farm supply, service and bargaining cooperatives. Included are cooperatives with sales of $30 million or more. For States where no cooperative had $30 million in sales, the largest five cooperatives were chosen. Additional cooperatives were included based on uniqueness of products handled or services provided.

12. Fresh Vegetable Packing Costs for Six Small Cooperatives.

An analysis of the operations of six small fresh vegetable packing cooperatives identified key operating cost variables. Average per unit costs were developed for the total operation, as well as for packingline and administrative functions. Factors influencing packingline costs are also identified. The report is intended to assist managers in monitoring the performance of their cooperatives and to provide guidelines to ACS staff in cooperative development.

Technical Assistance

In 1989, Agency staff participated in 97 formal technical assistance projects involving 119 cooperatives and producer groups in 31 States. This compares to 77 projects with 103 cooperatives in 27 States during 1988; increasing the number of cooperatives served by nearly 16 percent.

Established Cooperatives

In 1989, 46 projects involving a variety of issues and commodities were carried out on behalf of 68 established cooperatives. Summaries of several of these projects are listed below.

1. Mid U.S. Honey Producers Marketing Association. Concordia, KS

   This report profiled potential foreign markets for honey and included relative size of markets, consumer preferences, distribution channels, and import barriers and restrictions for a small group of Midwestern honey producers.

2. Southern States Cooperative, Inc. Richmond, VA

   This report developed cost comparisons of the cooperative's elevator operations. Several country elevators in the East and Midwest were visited and information was obtained about their operations.

3. Southwest Grain Cooperative. Gladstone, ND

   Management and board of directors of the cooperative requested ACS to act as a facilitator between management and the board of directors to help a five-year strategic plan to take the cooperative into the 1990's.

4. Mississippi Catfish Farmers Marketing Association. Jackson, MS

   This report examines the emerging structure of this new industry with the objective of recommending options for improving cooperative performance, enhancing producer returns while also maintaining producer control of further processing and marketing assets.

5. East Central/Select Sires and Michigan Animal Breeders Cooperative. Waupun, WI

   This study estimated the advantages and disadvantages to members of both cooperatives of combining assets and operations of the two artificial insemination organizations.

6. Northeast Dairy Herd Improvement Association and Pennsylvania Dairy Herd Improvement Association. University Park, PA

   ACS estimated unit cost reduction and revenue enhancement available to members of both cooperative organizations from joint operation of Northeast's forage analysis laboratory.

7. National Milk Producers Federation. Arlington, VA

   A study on costs of manufacturing milk into various products at plants operated by the National Milk Producers Federation's member cooperatives. The report was submitted by the Federation to USDA for determining the adequacy of the present manufacturing allowances in the price support calculation.

8. Comparative Analysis of Costs Manufacturing Cheese, Butter, Powder, and Related Products.

   The report, using 1987 data, was the fifth year of the technical assistance project comparing costs of manufacturing butter, powder, and cheese at 34 plants operated by 11 cooperatives.

9. MFA Livestock Association, Inc. Marshall, MO

This report presented the research findings regarding the pricing mechanisms for feeder pigs and examined diversification possibilities for livestock cooperatives.

10. CENTROL. Twin Valley, MN

ACS provided assistance in examining organizational, staffing, and compensation issues of the cooperative.

11. Cabot Farmers' Cooperative Creamery Co., Inc. Cabot, VT

This study examines the strategic operating and marketing plans of the cooperative and suggests an alternative means of profitably serving the cooperatives market for cheese and other specialty dairy products.

Emerging and Developing Cooperatives

In 1989, 51 projects were conducted involving emerging and developing cooperatives and producer groups representing 3,000 members. Nine of these groups were incorporated as new cooperatives in 1989. Summaries of a number of these projects are listed below.

1. North Carolina Sweet Potato and White Potato Cooperatives. Elizabeth City and Benton, NC

Producers in both the sweet potato and white potato industries in North Carolina have experienced less than desired prices for their crops because of their inability to share and use market information. Producers formed one cooperative in each industry to address this situation and gain antitrust protection. ACS assisted in identifying a suitable cooperative structure, preparing articles of incorporation and bylaws, and recommended marketings agreements and other operating features.

2. Sleeping Bear Cherry Marketing Cooperatives. Traverse City, MI

With high production, cherry prices have been low in recent years prompting some enterprising growers to begin working with an aggressive shipper to develop a fresh market for both sweet and tart cherries. As the operation grew in size, growers needed a cooperative to handle administrative matters related to grower contracts, shipping containers, cooling and handling services, grower payments, etc. ACS helped a grower steering committee plan and cost-out these services, identified a financing plan and service fees, and provided draft articles of incorporation, bylaws, and marketing agreement.

3. Saginaw Valley Beekeepers Association. Beaverton, MI

Association members have been dissatisfied with returns from honey buyers and their lack of marketing alternatives. Beekeepers also fear lower prices in the future from expected termination of the honey price support program. ACS was requested to assist in organizing a cooperative to bottle and market honey that would serve all Michigan producers, particularly small producers. Market research is being done to identify buyers and determine barriers to entry for new products in several market channels. A buyer survey to examine potential markets and prices will be conducted, followed by a financial feasibility study for the bottling and marketing operation.

4. The Moloka'i Ice House, Inc. Kaunakakai, HI

The Moloka'i Ice House, Inc. was organized to give fishermen a stronger voice in fisheries development on Moloka'i and to increase the fishermen's competiveness, efficiency, and returns from fishing. The cooperative is interested in leasing a fishery support facility. ACS has helped develop a break-even business plan for the ice shed in addition to working with the steering committee to develop a marketing agreement for the cooperative and ensuring that it is organized in conformity with cooperative principles and state requirements.

5. Greengold Marketing Cooperative. Billings, MT

Alfalfa producers and an alfalfa cube manufacturer have identified a market for a high quality alfalfa cube as a winter feed supplement for range cattle. Producers wish to form a cooperative to expand the base of farmers who could produce a quality alfalfa product, and to market the cubes in Montana and nearby States. ACS is working with a producer steering committee to determine interest in the concept and feasibility of operating the proposed cooperative.

6. Horticulture Producers Federated Association, Inc. Monticello, KY

Since it was incorporated in October 1983, the Horticulture Producers Federated Association (HPFA) has expanded membership from 5 cooperatives to 14 in 5 States. These cooperatives have an estimated 1,600 farmer members producing and marketing some 12 vegetable crops. During FY 1989, ACS staff worked with the HPFA Advisory Committee to help the Federation refine a centralized marketing plan that is enabling six members to more effectively market their products--cabbage, tomatoes, and peppers. Guidance was given to the board of directors in conducting the affairs of the organization.

7. Maine Fresh Pack Cooperatives. Machias, ME

The Maine Fresh Pack Cooperative was incorporated in 1986 to market fresh wild blueberries. In November 1986, the cooperative requested assistance in developing financial projections. ACS staff prepared financial projections and a business plan for 1987-1989 operations and presented them to the board, conducted board and bookkeeper training, and helped the cooperative develop a member-relations program.

8. Florida Aquaculture Processors. Blountstown, FL

Catfish farmers from Florida's Northern Panhandle requested ACS assistance in developing a catfish processing and marketing cooperative in January 1988. As a result of a survey conducted by ACS, the group incorporated as the Florida Aquaculture Processors (FAP) in June 1988. The cooperative is part of a coordinated effort by the State and local producers to increase catfish production in the area. Financial projections and a business plan for the start-up period and 3 years of operations are currently being developed. Several State agencies are working with ACS on the Advisory Committee. The current plans include independent processing operations of the cooperative in 1990.

9. Bayshore Shellfish. Eatontown, NJ

In December 1988, Monmouth County, New Jersey shellfish harvesters requested assistance from ACS in forming a cooperative to operate a depuration plant and market shellfish. A producers survey was conducted in April 1989. The results show there is sufficient interest to further explore the potential of a cooperative.

10. Ozark Table Grape Growers Association, Inc. Searcy, AR

Since 1985 when Ozark Table Grape Growers Association, Inc. (OTGGAI), a cooperative marketing organization, was incorporated, the membership has expanded from 45 full members to 69 in 1989. Sales of members' grapes has increased from 33 tons in 1985 to an estimated 30 tons in 1989. During FY 1989, ACS staff prepared a business plan with 3-year financial projections, and presented it to OTGGAI's board of directors and manager. This report will be used by the cooperative when it seeks further funding for its expanded operations, including possible financing of office and warehouse space. Assistance will be provided to OTGGAI in preparing new financial projections next year.

11. Port-A-Pig Marketers. Napolean, OH

In June 1989, hog producers from the Maumee Valley in Northwest Ohio requested assistance from ACS in organizing a cooperative to transport and market hogs. The group has about 26 members who are currently marketing together. ACS staff has developed a producer survey and has assisted in preparing a set of legal documents.

12. Carroll Christmas Tree Growers' Association. Carrollton, OH

The Carroll Christmas Tree Growers' Association requested long-term assistance from ACS in February 1987, to develop a Christmas tree marketing and supply cooperative. The association has 36 members in Eastern Ohio. The cooperative successfully marketed its first trees during the 1986 Christmas season and has provided supplies to members for 2 years. Marketing plans have been expanded to include landscape trees. ACS staff is providing assistance with bookkeeping, business plans, financial projections, hiring a manager, marketing agreements and general operating procedures.

13. Maryland Watermen's Cooperative. Annapolis, MD

At the request of the Maryland Watermen's Association, ACS has given assistance to the Maryland Watermen in helping them determine the feasibility of a seafood marketing cooperative. A survey of watermen was conducted by ACS and a report presented to the steering committee. The findings of the survey indicate there is sufficient interest, both in supplying product and equity financing, to support the proposed cooperative. Draft legal documents were prepared and discussed with the steering committee. Work has been started on the financial and management plan.

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